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Page

Comments on the proposal to validate *Aglaja* Renier, 1807 and AGLAJIDAE Pilsbry, 1895 (Mollusca). By W.O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*) and Henning Lemche (*Universitetets Zoologiske Museum, Universitetsparken 15,2100 Copenhagen K, Denmark*) 3

Comment on the proposed ruling on the authorship of *Conus moluccensis* (Mollusca: Gastropoda). By Alan J. Kohn (*Department of Zoology, University of Washington, Seattle, Washington 98195, U.S.A.*) 4

Reply to comments on the proposal to conserve *Liparthrum* Wollaston, 1864 (Coleoptera: SCOLYTIDAE). By Stephen L. Wood (*Department of Zoology, Brigham Young University, Provo, Utah, U.S.A.*) 4

Comments on the proposed suppression of *Rhiniodon* Smith, 1828 (Pisces). By R.K. Brooke (*Durban Museum, Smith Street, Durban 4001, R.S.A.*) and A.J. Bass (*Oceanographic Research Institute, P.O. Box 736, Durban 4000, R.S.A.*) 4

Comment on the proposal concerning *Polydrusus* Germar, 1817 and *Phyllobius* Germar, 1824 (Coleoptera). By Elwood C, Zimmerman (*CSIRO Division of Entomology, Canberra City, A.C.T. 2601, Australia*) 6

Comment supporting application for Opinion and Declaration that species-group names with unlatinized Greek adjectival endings are indeclinable, and proposal to modify language of proposed Declaration. By E. Eisenmann (*American Museum of Natural History, New York, N.Y. 10024, U.S.A.*) Reply by R.K. Brooke (*Durban Museum, Smith Street, Durban 4001, R.S.A.*) 6

Additional facts in the case of *Pharopteryx benoit* Rüppell, 1852 (Pisces). By E. Tortonese (*Museo Civico di Storia Naturale, 16121 Genoa, Italy*) 9

Comment on the proposals concerning *Notozus* Förster, 1853 (Hymenoptera: CHRYSIDIDAE). By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*) Replies by J.T. Huber (*University of Guelph, Ontario, Canada*) and D.S. Peters (*Forschungsinstitut Senckenberg, Senckenberganlage 25, 6 Frankfurt-M, Germany*) 9

Opinion 1055. *Gryllus hieroglyphicus* Johannes Mueller (Physiologist), 1826 (Insecta: Orthoptera) suppressed under the plenary powers 11

Opinion 1056. *Eudyptes atratus* Finsch, 1875 ex Hutton MS (Aves) suppressed under the plenary powers 16

Opinion 1057. *Donax variabilis* Schumacher, 1817 (Mollusca: Bivalvia) suppressed under the plenary powers; type-species designated for *Latona* Schumacher, 1817 19

Opinion 1058. *Papilio actaeon* Fabricius, 1775 (Lepidoptera): suppressed under the plenary powers 22

Opinion 1059. *Calamopora* Goldfuss, 1829 (Anthozoa, Tabulata): suppressed under the plenary powers 24

Opinion 1060. *Diomedea leptorhyncha* Coues, 1866 (Aves): suppressed under the plenary powers 27

Opinion 1061. *Homoceras* Hyatt, 1884 (Cephalopoda): designation of type-species 29

Opinion 1062. *Anobium* Fabricius, 1775; *Grynobius* Thomson, 1859; *Priobium* Motschulsky, 1845 (Coleoptera): designation of type-species under the plenary powers 31

Opinion 1063. *Lechriodus* Boulenger, 1882 (Amphibia Salientia): designation of type-species 34

Opinion 1064. *Ptenura* Templeton, 1844: *crystallina, Podura,* Müller, 1776 (Collembola): suppressed under the plenary powers 36

Revived proposals for stabilizing names in the *Tipula oleracea* species-group (Diptera: TIPULIDAE). By A.M. Hutson, R.I. Vane-Wright and P.S. Cranston (*British Museum (Natural History), London SW7 5BD* 39

Request for the determination of the generic names of the Baboon and the Mandrill (Mammalia: Primates, CERCOPITHECIDAE). By E. Delson (*Department of Anthropology, Lehman College, City University of New York, Bronx, New York 10486, U.S.A.*) and P.H. Napier (*Department of Zoology, British Museum (Natural History), London, SW7 5BD, England*) 46

Beyrichia M'Coy, 1846 (Crustacea: Ostracoda): request for the designation of a type-species and neotype designation for that species under the plenary powers. By David J. Siveter and P.C. Sylvester-Bradley (*Department of Geology, University of Leicester, Leicester, England*) 61

Reply to Dr. Krombein's comment on proposed suppression of *Euplilis* Risso, 1826 (Hymenoptera, SPHECIDAE) in favour of *Rhopalum* Stephens, 1829. By R.M. Bohart (*University of California, Davis, California 95616, U.S.A.*) and A.S. Menke (*Systematic Entomology Laboratory, U.S.D.A., c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.*) 68

Comment on application for a ruling on the availability of five specific names proposed as new for the genus *Heterodera* A. Schmidt, 1871 (Nematoda) in "A Preliminary key to British species of *Heterodera* for use in soil examination". By B.A. Cooper, 1955. By Russell M. Jeffords (*8002 Beverly Hill, Houston, Texas 77063, U.S.A.*) 69

Comment on the proposed suppression of *Rhiniodon* Smith, 1828, in favour of *Rhincodon* Smith, 1829. By Carl L. Hubbs (*Professor of Biology Emeritus, Scripps Institution of Oceanography, La Jolla, California 92093, U.S.A.;* retired member of the Commission), Leonard J.V. Compagno (*Department of Biological Sciences, Stanford University, Stanford, California 94305, U.S.A.*) and W.I. Follett (*Department of Ichthyology, California Academy of Sciences, San Francisco, California 94118, U.S.A.*) 70

Comments on the application concerning *Notozus* Förster, 1853. By W.J. Pulawski (*Wroclaw University, Poland*) and R.M. Bohart (*University of California, Davis, California 95616, U.S.A.*) 71

Comment on the proposed validation of *Halecium* Oken, 1815. By H. Lemche (*Universitetets Zoologiske Museum, Universitetsparken 15, Copenhagen, Denmark*) and reply by Dr. Cornelius 72

Request for suppression and validation of names related to the ELAPIDAE (Reptilia: Serpentes). By Hobart M. Smith and Rozella B. Smith (*Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, Colorado 80309 U.S.A.*) 73

The Family-group name of the Leaf-eating Monkeys (Mammalia, Primates): proposal to give COLOBIDAE Blyth, 1875, precedence over SEMNOPITHECIDAE Owen, 1843, and PRESBYTINA Gray, 1825. By Eric Delson (*Department of Anthropology, Lehman College, City University of New York, Bronx, New York 10468, U.S.A.*) 85

Xiphiurus Smith, 1847, proposed suppression in favour of *Genypterus* Philippi, 1857 (Pisces, OPHIDIIDAE), By C Richard Robins and Robert N. Lea (*Rosenstiel School of Marine and Atmospheric Science, University of Miami, Miami, Florida 33149, U.S.A.*) 90

International Trust for Zoological Nomenclature - Financial Report and Accounts 1974 93

Should microform methods be accepted as valid methods of publication under the code? By R.V. Melville (Secretary, International Commission on Zoological Nomenclature) 98

Pleurocera Rafinesque, 1818 (Gastropoda): proposed deisignation of type-species under the plenary powers. By R.V. Melville (Secretary, International Commission on Zoological Nomenclature) 105

International Trust for Zoological Nomenclature - Financial Report and Accounts 1975 113

Proposed conservation of the Family-group name ERIOCOCCIDAE Cockerell, 1899 (Insecta, Homoptera) and the designation of a type-species for *Eriococcus* Targioni-Tozzetti, 1868 under the plenary powers. By Douglass R. Miller (*Systematic Entomology Laboratory, Agriculture Research Service, U.S.D.A., Beltsville, Md.*) and D.J. Williams (*Commonwealth Institute of Entomology, London*) 118

Tanystropheus H. von Meyer [1852] (Reptilia): revised request for conservation under the plenary powers. By Rupert Wild (*Staatliches Museum für Naturkunde, Arsenalplatz 3, 7140 Ludwigsburg, Germany*) 124

Application for the suppression of the name *Sminthopsis murina* var. *constricta* Spencer, 1896 (Marsupialia, DASYURIDAE): By M. Archer (*Queensland Museum, Brisbane, Queensland, Australia*) 127

Obituary: Hilbrand Boschma 134

Comment: *Pan* and *Panthera* or Oken's Lehrbuch? By P. Hershkovitz (*Field Museum of Natural History, Chicago, Illinois 60605*), and reply to P. Hershkovitz by G.B. Corbet, J.E. Hill, J.M. Ingles and P.H. Napier (*British Museum (Natural History), Cromwell Road, London SW7 5BD*) 135

Comments on *Giraffa camelopardalis australis* Rhoads, 1896 (Mammalia). By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*) and A.I. Dagg (*University of Waterloo, Ontario, Canada N2L 3G1*) 136

Comments on a Challenge to the family name ATTACIDAE (Insecta: Lepidoptera). By I.W.B. Nye, D.S. Fletcher and A. Watson (*British Museum (Natural History), London SW7 5BD*) and C. Lemaire (*c/o Laboratoire d'Entomologie, Muséum national d'Histoire naturelle, 45 rue de Buffon, 75005, Paris*) 137

Comments on the revised application for a ruling on the stem of the Family-group name based on the type-genus *Petromyzon* Linnaeus, 1758. By W.I. Follett and L.J. Dempster (*California Academy of Sciences, San Francisco, California 94118, U.S.A.*) and C, Richard Robins (*Chairman, Committee on Names of Fishes, American Fisheries Society and American Society of Ichthyologists and Herpetologists; Maytag Professor of Ichthyology, School of Marine and Atmospheric Science, University of Miami*) 142

Comments on CIRCINAE Sundevall, 1836 (Aves) versus CIRCINAE Dall, 1895 (Mollusca). By E. Eisenmann (*American Museum of Natural History, New York, N.Y. 10024, U.S.A.*); G.N. Kashin (*Prospect Vernadskogo No. 61, app. 53, Moscow 117415, U.S.S.R.*), R.K. Brooke (*P.O. Box 1690, Salisbury, Rhodesia*): reply by Dr. B. Roth (*California Academy of Sciences, San Francisco, California 94118, U.S.A.*) to K.M. Brooke; comment by D. Heppell (*Royal Scottish Museum, Edinburgh EH1 1JF, Scotland*) 143

Comment on proposed suppression of *Parnalius* Rafinesque, 1815 in favour of *Zerynthia* Ochsenheimer, 1816. By O. Kudrna (*Portsmouth Polytechnic, Portsmouth, England*), P.R. Ackery, N.D. Riley and L.G. Higgins (*British Museum (Natural History), London SW7 5BD*) 145

Comments on the proposed designation of type-species for *Eriophyes* Siebold, 1851 and *Phytoptus* Dujardin, 1851 (Acarina: Eriophyoidea). By E.E. Lindquist (*Biosystematics Research Institute, Agriculture Research Branch, Ottawa, Ontario, K1A OC6, Canada*); D.C.M. Manson (*Department of Agriculture, Plant Health and Diagnostic Station P.O. Box 241, Levin, New Zealand*); M.K.P. Smith Meyer (*Plant Protection Research Institute, Pretoria, South Africa*) and G.W. Ramsay (*Department of Scientific and Industrial Research, Entomology Divison, Mt. Albert Research Centre, Auckland, New Zealand*) 146

Comments on the request to determine the generic names of the Baboon and the Mandrill. By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*); E. Delson and P.H. Napier; J. Meester (*University of Natal, Pietermaritzburg, Natal South Africa*); and R.H.N. Smithers (*Associate Curator of Mammals, Queen Victoria Museum, Causeway, Rhodesia*) 148

Comments on the revived application concerning *Tipula oleracea* Linnaeus, 1758 by L.B. Holthuis and the Secretary, International Commission on Zoological nomenclature 150

Opinion 1065. *Polyzonium germanicum* Brandt, 1837, conserved: *Platyulus audouinii* Gervais, 1836, suppressed (Diplopoda, POLYZONIIDAE) 151

Opinion 1066. *Lyda alternans* Costa, 1859, given precedence over *Lyda inanis* Klug, 1808 (Insecta: Coleoptera) 155

Opinion 1067. Suppression of *Delphinus pernettensis* de Blainville, 1817 and *Delphinus pernettyi* Desmarest, 1820 (Mammalia: Cetacea) 157

Opinion 1068. LEPTOSOMATIDAE in Aves and Nematoda: resolution of homonymy arising from similarity in the names of the type genera 159

Opinion 1069. Correction of entry in Official List of Family-Group names in Zoology for Name Number428 (THRAUPIDAE) 162

Opinion 1070. Conservation of *Archaeopteryx lithographica* von Meyer, 1861 (Aves) 165

Opinion 1071. Emendation under the plenary powers of LIOPELMATINA to LEIOPELMATIDAE (Amphibia, Salientia) 167

Opinion 1072. Refusal of request to suppress *Hyla crucialis* Harlan, 1826 (Amphibia) 170

Opinion 1073. Validation of RIODINIDAE Grote, 1895 (1827) (Lepidoptera) 172

Opinion 1074. *Murex rana bubo* Linnaeus, 1758, designated as type-species of *Tutufa* Jousseaume, 1881 (Gastropoda) 174

Opinion 1075. Conservation of *Striglina* Guenée, 1877 (Lepidoptera, THYRIDIDAE) 176

Opinion 1076. Refusal of application for use of the plenary powers to suppress *Procyon brachyurus* Wiegmann, 1837 and *Procyon obscurus* Wiegmann, 1837 (Mammalia, Carnivora) 179

Opinion 1077. Refusal of request to use the plenary powers to suppress the generic name *Cynocephalus* Boddaert, 1768 (Mammalia) 182

Minutes of general meeting of the International Commission on Zoological Nomenclautre at the XIX General Assembly of IUBS, Bangalore, India, from 27th September to 2nd October 1976 185

Amendments to an application for the designation of a type-species under the plenary powers for *Drupella* Thiele, 1925 (Gastropoda). By W.O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*) 190

Cotyle Boie, 1826 (Aves, HIRUNDINIDAE): request for suppression. By R.K. Brooke (*Durban Museum, Smith Street, Durban 4001, RSA*) 192

Request for the conservation of *Rana sphenocephala* Cope, 1886, and the suppression of *Rana utricularius* Harlan, 1826 and *Rana virescens* Cope. 1889 (Amphibia: Salientia). By L.E. Brown and R.S. Funk (*Department of Biological Sciences, Illinois State University, Normal, Illinois, U.S.A.*); and Hobart M. Smith (*Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, Colorado, U.S.A.*) 195

Leptotyphlops and *Ramphotyphlops* Fitzinger, 1843 (Reptilia, Serpentes): proposed conservation under the plenary powers. By A.F. Stimson (*British Museum (Natural History), London S.W.7*); J. Robb (*Department of Zoology, University of Auckland New Zealand*) and G. Underwood (*Department of Biological Sciences, City of London Polytechnic*) 204

The type-species of *Goniurellia* Hendel, 1927 (Insecta: Diptera: TEPHRITIDAE): by A. Freidberg and J. Kugler (*Department of Zoology, The George S. Wise Center for Life Sciences, Tel Aviv University, Israel*) 208

ACYONIDAE Ameghino, 1889 (Mammalia): proposed suppression under the plenary powers. By Larry G. Marshall and W.A. Clemens (*Department of Paleontology, University of California Berkeley*), R.J. Hoffstetter (*Institut de Paléontologie, Muséum National d'Histoire Naturelle, Paris, France*), Rosendo Pascual (*Facultad de Ciencias Naturales y Museo de La Plata, La Plata, Argentina*), Bryan Patterson (*Museum of Comparative Zoology, Harvard University, Cambridge*), Richard H. Tedford (*Department of Vertebrate Paleontology, American Museum of Natural History, New York*) and W.D. Turnbull (*Field Museum of Natural History, Chicago*) 212

Psammophis moniliger var. *bilineatus* Peters, 1867 (Reptilia: COLUBRIDAE): proposed suppression under the plenary powers in favour of *P. sibilans subtaeniata* Peters, 1882. By D.G. Broadley (*Umtali Museum, Umtali, Rhodesia*) 214

Philodryas nattereri Steindachner, 1870 (Reptilia: Serpentes): proposed conservation. By R.A. Thomas (*Department of Biology, Texas A & M University, College Station, Texas 77843*) 216

The status of *Siphonophora* Fischer, 1823 (Bryozoa) and the validity of *Siphonophora* Brandt, 1837 (Diplopoda, POLYZONIIDA). By C.A.W. Jeekel (*Institute of Taxonomic Zoology (Zoological Museum), University of Amsterdam, The Netherlands*) 218

Pieris castoria Reakirt, 1867 (Insecta, Lepidoptera): proposed suppression under the plenary powers. By A.M. Shapiro (*Departments of Zoology and Entomology, University of California, Davis, California 95616 U.S.A.*) 221

Culex loewi Giebel, 1862 (Insecta: Diptera: C ULCIDAE): request for suppression under the plenary powers so as to conserve *Toxorhynchites brevipalpis* Theobald, 1901 (Official List of generic names No 1341; Official List of Specific Names No. 1615) By G.B. White (*Department of Entomology, British Museum (Natural History), London, SW7 5BD*) 228

Stromatoporella Nicholson, 1886 (Fossil Order Stromatoporoidea): Problem of the type-specimen of the type-species, *Stromatoporella granulata* (Nicholson, 1873). By Joseph St. Jean, Jn. (*Department of Geology, University of North Carolina, Chapel Hill, North Carolina, 27514, U.S.A.*) 233

Revised proposals concerning the validation of *Ditylenchus* Filipjev, 1936 (Nematoda). By the Secretary, International Commission on Zoological Nomenclature 241

Request that the International Commission rule to suppress Fowler's lectotype designation of *Alburnops plumbeolus* Cope, 1865 and *Hypsilepis cornutus cerasinus* Cope, 1868. By C.R. Gilbert (*The Florida State Museum, University of Florida, Gainesville, Florida 32611, U.S.A.*) 245

Chlorophis carinatus Andersson, 1901, proposed nomenclatural precedence over *Philothamnus nigrofasciatus* Buchholz and Peters, 1875, its senior subjective synonym. (Reptilia: COLUBRIDAE). By Barry Hughes (*University of Ghana, Legon, Ghana*) 248

Calymene variolaris Brongniart, 1822 (Trilobita): proposed use of the plenary powers to designate a neotype in harmony with current use. By R.P. Tripp (*British Museum (Natural History),London*) J.T. Temple (*Birkbeck College, London*) and K.C. Gass (*Milwaukee, U.S.A.*) 250

Proposed direction to amend the date of *Entomostracites punctatus* Wahlenberg (Trilobita) from 1821 to [1818] (Official List of Specific Names in Zoology No. 1595). By The Secretary, International Commission on Zoological Nomenclature 253

Index to Authors 255

List of Decisions in this Volume 257

Index to Key Names 258

Names placed on Official Lists and Indexes in Decisions published in volume 33 262

Corrigenda 264

Particulars of dates of publication of the several parts in which the present volume was published 264

Instructions to Binder 265

Volume 33, Part 1
pp. 1-64, 1 pl.

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CONTENTS

	Page
Notices prescribed by the International Congress of Zoology:	
Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature*	1
Notices of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases	1
List of new applications	1
Election of a new member	2

(*continued inside back wrapper*)

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(continued inside back wrapper)

BULLETIN OF ZOOLOGICAL NOMENCLATURE

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PURCHASED

NOTICES

(a) *Date of Commencement of Voting.*- In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.* - The possible use of its plenary powers is involved in the following applications published in the present part of the *Bulletin:*

(1) *Tipula oleracea* Linnaeus, 1758 (Diptera: TIPULIDAE), revived proposals for stabilizing nomenclature in the group of species concerned. Z.N.(S.)896.

(2) Baboon and Mandrill (Mammalia: Primates), request for determination of the generic names for. Z.N.(S.)2093.

(3) *Beyrichia* M'Coy, 1846 (Crustacea: Ostracoda); request for designation of type-species and neotype therefor. Z.N.(S.)1117.

(c) The following new applications have been received since the publication of vol.32(4) on 30th January 1976. Those marked with an asterisk involve the application of Articles 23 a-b and 79b.

(1) *Alburnops plumbeolus* Cope, 1865 and *Hypsilepis cornutus cerasinus* Cope, 1868; request to suppress lectotype designations. Z.N.(S.)2154. (C.R. Gilbert)

(2) *Typhlina* Wagler, 1830 (Reptilia: Serpentes), proposed suppression. Z.N.(S.)2155 (A.F. Stimson, J. Robb and E. Underwood)

(3) Scientific name for the Loch Ness Monster. Z.N. (S.) 2156. (Peter Scott and R.H. Rines)

(4) *Goniurellia* Hendel, 1927 (Diptera: TEPHRITIDAE), proposed type-species designation. Z.N.(S.)2157. (A. Freidberg and J. Kugler)

(5) *Culex quinquefasciatus* Say, 1823 and *C. fatigans* Wiedemann, 1828 (Diptera: CULICIDAE), proposed resolution. Z.N.(S.)2158. (G.H. White)

*(6) ACYONIDAE Ameghino, 1889 (Mammalia), proposed suppression. Z.N.(S.)2159. (L.G. Marshall and others)

(7) *Lamprocabera* Inoue, 1958 (Lepidoptera: GEOMETRIDAE), proposed designation of type-species. Z.N.(S.)2160. (H. Inoue)

*(8) *Iliastus* Gistl, [1847] (Hemiptera: BELOSTOMATIDAE), proposed suppression. Z.N.(S.)2161. (A. Menke)

*(9) *Trionyx steindachneri* Siebenrock, 1906 (Reptilia: Testudines), proposed validation. Z.N.(S.)2162. (R.G. Webb)

(10) *Synapturanus* Carvalho, 1954 (Amphibia: MICROHYLIDAE), proposed designation of type-species. Z.N.(S.)2163. (C. Nelson and J. Lescure)

*(11) *Labeo rueppellii* Pfeffer, 1896 (Pisces: CYPRINIDAE), proposed suppression. Z.N.(S.)2164. (G. McG. Reid)

*(12) *Psammophis moniliger* var. *bilineatus* Peters, 1867 (Reptilia: Serpentes), proposed suppression. Z.N.(S.)2165. (D. Broadley)

*(13) *Psammophis molochina* Berthold, 1846 (Reptilia: Serpentes), proposed suppression. Z.N.(S.)2166. (R.A. Thomas)

(14) *Pennahia* Fowler, 1926 (Pisces), proposed designation of type-species. Z.N.(S.)2167. (E. Trewavas)

ELECTION OF A NEW MEMBER OF THE COMMISSION

Dr. Harold E. Welch has been elected a member of the Commission in the place of Dr. Eugene Munroe, resigned. Dr. Welch, who is aged 47, is Professor and Head of the Department of Zoology at the University of Manitoba, Canada. He is a specialist in the taxonomy of nematodes and in their use in biological control. He was Director of the Entomological Society of Canada, 1966-68 and President of the Canadian Society of Zoology, 1969-70. He has wide committee experience and served as a Canadian delegate to the I.U.B.S. assemblies in Washington (1970) and Ustaoset, Norway, (1973).

c/o British Museum (Natural History)
Cromwell Road,
London SW7 5BD
United Kingdom
23 March 1976

R. V. MELVILLE
Secretary,
International Commission on
Zoological Nomenclature

COMMENTS ON THE PROPOSAL TO VALIDATE *AGLAJA* RENIER, 1807 AND AGLAJIDAE PILSBRY, 1895 (MOLLUSCA). Z.N. (S.) 1092.

(see *Bull.* vol.31: 196-199)

(1) by W.O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*)

I am opposed to the validation of *Aglaja* Renier, 1807, and the family-group name AGLAJIDAE Pilsbry, 1895, as set out in the application by Dr. H. Lemche. The acceptance of *Aglaja* Renier, 1807, is undesirable when *Doridium* Meckel, 1809, is a taxonomically available name even though its type-species is a synonym. The family-group name DORIDIINAE J.E. Gray, 1847 (*ex* Doridiina Gray, 1847, *Proc. Zool. Soc. Lond.*: 161), based on *Doridium* Meckel, 1809, has chronological priority over AGLAJIDAE Pilsbry, 1895, and is also considerably earlier than DORIDIIDAE Fischer, 1883.

It was stated by Dr. Lemche that *Aglaja* Renier, 1807, has been in general use for about 80 years but no list of authors using *Aglaja* prior to 1959 has been enclosed to support this claim. After 1959 the usage of *Aglaja* in literature has been in direct breach of the Rules of I.C.Z.N. and does not qualify in my opinion as valid usage.

No confusion can result if DORIDAE is used for *Doris* Linnaeus, 1758, and DORIDIIDAE for *Doridium* Meckel, 1809. M.E. Gray (1850, *Figs. mollusc. Animals* vol.4: 102) already last century emended DORIDIDAE (based on *Doris* Linnaeus) to DORIDAE.

(2) By Henning Lemche (*Universitetets Zoologiske Museum, Universitetsparken 15, 2100 Copenhagen K, Denmark*

First, I am indebted to Dr. Cernohorsky for drawing my attention to an earlier publication of a family-group name based on *Doridium*. This leads to the following changes in my formal proposals:

(1)(c) the family name AGLAJIDAE Pilsbry, 1895 (1847), based on the generic name *Aglaja* Renier, 1807 (corr. pro 1804) as validated under the plenary powers in (b) above, and as amended from DORIDIINA J.E. Gray, 1847, based on *Doridium* Meckel, 1809, a junior subjective synonym of *Aglaja* Renier, 1807;

(5) To place on the Official List of Family-group Names in Zoology the name AGLAJIDAE Pilsbry, 1895 (1847), as accepted under (1)(c) above;

(7)(b) DORIDIINA J.E. Gray, 1847, an invalid original spelling of AGLAJIDAE [Gray, 1847] as corrected under (1)(c) above.

Secondly, I may say that the turnover from *Doridium* to *Aglaja* was so prompt and universal that any clearer demonstration of it is a waste of time and effort. However, the following list of references to *Aglaja* since 1941 is taken from the *Zoological Record* (in which I find no references to *Doridium* since that date):-

1941. ALLAN, J., *Vict. Nat.* Melbourne. vol.57.

1946. WHITE, K.M., *Proc. malac. Soc.* London. vol.26: 91-102; 167-172

1949. BABA, K., Opisthobranchia of Sagami Bay.

1953. PRUVOT-FOL, A., *Trav. Inst. Sci. chérif.* (2) (erroneously given as "5")

1954. ———— Faune de France (58) Mollusques Opisthobranches.

1959 INABA, A., *Annot. zool. Jap.* 32.

1965. GONOR, J., *Diss. Abstr.* vol. 26: 2388.

1966. MAC FARLAND, F.M., *Mem. Calif. Acad. Sci.* vol. 6.

—— MARCUS, E. & E., *Stud. Trop. Oceanogr.* vol. 4.

1967. ———— *ibid.*, vol. 6.

—— HURST, A. *Veliger*, vol. 9.

1969. MARCUS, E. & E. *Beitr. neotrop. Fauna* vol. 6.

1973. FU-SHIANG CHIA & SKEEL, M. *Veliger.*

COMMENT ON THE PROPOSED RULING ON THE AUTHORSHIP OF *CONUS MOLUCCENSIS* (MOLLUSCA; GASTROPODA). Z.N.(S.) 2059.

(see *Bull.* vol.31: 156-158)

By Alan J. Kohn (*Department of Zoology, University of Washington, Seattle, Washington 98195, U.S.A.*)

I urge the Commission to vote for Alternative B as proposed by Cernohorsky, for the following reasons:

1) Ample precedent exists in Opinion 96 that the provision of an indication from Chemnitz (1795) constitutes valid description and renders a name available. While the case leading to Opinion 96 generated considerable dispute, general acceptance of the Commission's ruling has enhanced nomenclatural stability.

2) As Cernohorsky implies, suppression of the name *Conus moluccensis* Dillwyn would pose but not answer the question of the availability of other such names in Dillwyn's work.

3) While Alternative A would suppress *C. moluccensis* Dillwyn, any other similar usages of *C. moluccensis* during the period 1817-1838 would not be suppressed. While i know of no such usages, their existence in the literature has not been ruled out.

REPLY TO COMMENTS ON THE PROPOSAL TO CONSERVE *LIPARTHRUM* WOLLASTON, 1864 (COLEOPTERA: SCOLYTIDAE). Z.N.(S.)2071

(see *Bull.* vol.31: 234-5; vol.32: 125)

By Stephen L. Wood (*Department of Zoology, Brigham Young University, Provo, Utah, U.S.A.*)

Article 23a-b of the Code states: "The Law of Priority is to be used to promote stability and is not intended to be used to upset a long-established name in its accustomed meaning, through the introduction of an unused name which is its senior synonym". The name *Liparthrum* Wollaston, 1864, was used consistently by all authors from 1864 to 1968 in more than 150 citations. The original spelling of this name, *Leiparthrum* Wollaston, 1854, a senior objective synonym, was subsequently used once for two species by Wollaston (1861, *Trans. ent. Soc. London* (3) vol.1: 39) and once by Bright (1968) for the validation of a new specific name.

2. Because the accepted transliteration of the Greek "ei" to Latin is "i", it may be presumed that Wollaston deliberately emended the spelling of his name so as to correct the error in transliteration. *Liparthrum* is thus admittedly an unjustified emendation of *Leiparthrum* in terms of Art. 33a. It has, nevertheless, been used in every modern catalogue or manual treating this genus. It is obvious that the insertion of an "e" into the name will result in a host of spelling errors due to oversight or to the use of out-dated literature.

3. In my original application I asked for the suppression of *Leiparthrum* and for a ruling that *Liparthrum* was an unjustified emendation (rather than an incorrect subsequent spelling). Now, however, I should like to adopt the course which Dr. Holthuis has proposed in the analogous case of *Phloeotribus* (see *Bull.* vol.32: 208) and ask for a ruling under the plenary powers that *Liparthrum* is the correct original spelling of the name. I therefore wish to withdraw my original proposals and in their place now ask the Commission:

(1) to rule under the plenary powers that *Liparthrum* is the correct original spelling of the generic name *Leiparthrum* Wollaston, 1854.

(2) to place on the Official List of Generic Names in Zoology the generic name *Liparthrum* Wollaston, 1854 (gender: neuter), type-species by original designation, *Liparthrum bituberculatum* Wollaston, 1854 (ruled under the plenary powers in (1) above to be a correct original spelling);

(3) to place on the Official List of Specific Names in Zoology the specific name *bituberculatum* Wollaston, 1854, as published in the binomen *Leiparthrum bituberculatum* (specific name of type-species of *Liparthrum* Wollaston, 1854);

(4) to place the generic name *Leiparthrum* Wollaston, 1854 (an incorrect original spelling through the ruling under the plenary powers in (1) above of *Liparthrum* Wollaston, 1854) on the Official Index of Rejected and Invalid Generic Names in Zoology.

COMMENTS ON THE PROPOSED SUPPRESSION OF *RHINIODON* SMITH, 1828 (PISCES) Z.N.(S.) 2090

(see *Bull.* vol.32: p.163)

By R.K. Brooke, (*Durban Museum, Smith Street, Durban 4001, R.S.A.*) and
A.J. Bass (*Oceanographic Research Institute, P.O. Box 736, Durban 4000, R.S.A.*)

In para. 4 of the Application we read "It is thus impossible to determine Smith's original intent with regard to spelling.". There is, however, evidence bearing on this matter Ripley (1959) drew attention to a volume of collected papers of Sir Andrew Smith in the William Robertson Coe Library of Yale University (*New Haven, Conn.*) which was bound up for Smith's own use and in which the MS notes appear to be those

of Smith (see below). Through the courtesy of the Librarian R.K.B. posseses a photocopy of Smith (1828a and b). Two of the names proposed in Smith (1828a and b) have been emended in ink. The first (in 1828a) is *Ploceus ocularis* (Aves) to *ocularius* by the addition of the penultimate 'u'. The emended spelling was long used in African ornithology based on its publication in Smith (1839) but modern writers have reverted to the original spelling *ocularis* (e.g. Mackworth-Praed & Grant, 1955: 918, White, 1963: 143, Clancey, 1966: 574, Hall & Moreau, 1970: 290).

The second emended name (in 1828b) is *Rhiniodon*. Where it first appears as a generic proposal it is emended to *Rineodon* by the deletion of the 'h' and by the substitution of 'e' for the second 'i'. Where the binomen *Rhiniodon typus* is proposed the generic name is again emended to *Rineodon*. It is clear that at some stage Smith considered that the *South African Commercial Advertiser* had misprinted his proposals. The foregoing data add to the complexity of the history of the generic name of the Whale Shark but do not constitute grounds for correcting the original spelling in terms of Article 32a(ii) of the Code since Smith's MS. alterations are a source of information external to the original publication.

In the fourth line of the generic diagnosis of *Rhiniodon* (fifth line of the reprint in Penrith, 1972) Smith has altered 'compressed' to 'depressed' in ink. The other MS. alterations concern birds and include an addition to *Ploceus ocularis* "one ((female)) killed in May near Umzimculo ((= Umzimkulu)) had the chin and throat reddish yellow". Smith crossed the Umzimkulu river, Natal, early in May 1832 (Kirby, 1965:105). This would seem certain proof that the MS. notes were written by Smith. There are no MS. alterations to the sections dealing with Reptilia and Amphibia.

In addition to the work of Compagno (1973: 28) cited in the Application, *Rhiniodon* and RHINIODONTIDAE have been used by Bass et al. (1975: 50). What publications in press use these names is, of course, not known to us.

All generic names applied to the Whale Shark are variants of one name and little confusion would be caused to students and readers by using the earliest form rather than the commonest. The history of the name *Rhiniodon* and its variants is tangled and complicated by uncertainties as to which are incorrect subsequent spellings and which are unjustified emendations. The other 'misspelt' name in the *South African Commercial Advertiser* (*Ploceus ocularis*) has been successfully restored to its proper place as the valid name of its species. It would seem preferable in the light of these considerations for the Commission to decline to use its plenary powers in this case and thereby permit Article 32 to operate normally. This decision would be registered by placing the generic name *Rhiniodon* Smith, 1828 (gender: masculine), type-species, under Article 68b, *Rhiniodon typus* Smith, 1828, on the Official List of Generic Names, and the specific name of the type-species on the Official List of Specific Names in Zoology.

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COMMENT ON THE PROPOSALCONCERNING *POLYDRUSUS* GERMAR, 1817, AND *PHYLLOBIUS* GERMAR, 1824 (COLEOPTERA). Z.N.(S.)2107

By Elwood C. Zimmermann (*CSIRO Division of Entomology, Canberra City, A.C.T. 2601, Australia*)

(see *Bull.* 32: 175-176)

I wish to support the application regarding *Polydrusus* and *Phyllobius*.

Would it, however, be better now to adopt the spelling POLYDRUSINI instead of POLYDROSINI in view of the fact that the type-genus is to be *Polydrusus*? It would appear that endless confusion may result if the family-group name spelling differs by only one letter from the spelling of the name of the type-genus, although this is acceptable under the Code. The situation would be different if the synonym had a more distinctive spelling.

[Dr. Thompson's application in this case is also supported by Dr. M.G. Morris (*Monks Wood Experimental Station, Huntingdon, PE17 2LS, England*), who is a specialist with a particular interest also in general and applied ecological studies, and Dr. M. Ter-Minassian (*Academy of Sciences, Leningrad V-164, U.S.S.R.*) R.V.M.]

COMMENT SUPPORTING APPLICATION FOR OPINION AND DECLARATION THAT SPECIES-GROUP NAMES WITH UNLATINIZED GREEK ADJECTIVAL ENDINGS ARE INDECLINABLE, AND PROPOSAL TO MODIFY LANGUAGE OF PROPOSED DECLARATION. Z.N.(S.)2111

(see *Bull.* 32: 188-191)

(1) By E. Eisenmann (*American Museum of Natural History, New York, N.Y. 10024, U.S.A.*)

The applicant, R.K. Brooke, calls attention to two problem cases in ornithology where a species-group name based on a Greek adjective, published *without a latinized termination*, was either transferred to a genus of a different gender or was originally given an inappropriate Greek gender ending. The question is whether the termination must be changed and transliterated to the "correct" Greek gender ending. Doubtless the same problem exists in other cases.The applicant requests: a) an Opinion that *unlatinized* adjectival terminations do *not* change to conform with the gender of a genus; and b) a Declaration clarifying the proem of Article 30 to make this principle plain by substituting for the words "an adjective" the words "a Latin adjective".

1. I fully support the principle that only adjectives with Latin or latinized terminations shift endings to agree with the generic gender, and agree that this is a proper case for a Declaration under new Article 78a, for the application merely seeks to clarify what is implicit in the Code. As the Code makes plain [Arts. 11 b, 11 b(ii); see also 30(3) and (4)] that Latin (or scientific Latin) is the only language of scientific nomenclature, species-group names are *not to be changed* for gender to adopt the "correct" terminations of other languages. These Articles provide that scientific names derived from Greek (or any other language) are accepted, when in Latin letters, because "treated as latinized... even if the ending is not latinized". The same principle was enunciated by the Règles Internationales [see Règle 14 (2) and Recommendation (i)] and by earlier national codes [see American Ornithologists' Union Code of Nomenclature, Principle III (1885)]. Words of Greek origin being deemed latinized cease to follow Greek inflection when accepted as scientific species-group names.

2. The phrasing of Mr. Brooke's proposed Declaration (which would substitute "a Latin adjective" for "an adjective" in Article 30 (line 1-2)) seems a bit too restrictive, for it might be interpreted as not covering adjectives of non-Latin origin bearing fully latinized terminations. Names of Greek origin with *latinized endings*, e.g., *erythroleucus, glauca, phoeniceum*, are treated like true Latin words and change endings for gender in accordance with *Latin* usage. The critical point is whether the termination is latinized [see Art. 30(3) and (4)]. To prevent any ambiguity I propose that the Declaration clarifying the proem of Article 30 substitute for "an adjective" the words:

> "a Latin adjective or adjective with latinized termination".

I would also recommend that to aid zoologists an "example" be inserted, along the following (or similar) lines:

> "Example:- Adjectives derived from languages other than Latin, if they have latinized terminations, e.g., *erythroleucus* (m.), *glauca* (f.), *phoeniceum* (n.), undergo change of ending to agree with gender like Latin words of similar termination, but if without latinized termination, e.g., *erythroleucos, glauce, phoeniceon, melas* (*melaina* or *melaena*, and *melan*), they keep their original endings regardless of gender".

3. Because the matter is of general application and the principle is important, and because so many

words of Greek origin have been accepted into zoological nomenclature it may be helpful to emphasize certain considerations, which either are not mentioned in the application or are only passingly referred to. These strongly support the applicant's basic position. It is fair to say that when Mr. Brooke originally consulted me (as Chairman of the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress) my initial reaction was to assume that Greek declension should be followed. On further investigation, however, it seemed plain that this would be contrary to the Code provisions making Latin the sole language of zoological nomenclature. Moreover, as a matter of policy, it seemed undesirable to invest Greek with the status of "a second language" of nomenclature, - which would require a basic amendment of the Code.

4. Art. 11 b and 11 b(ii) of the Code make plain that Latin is the only language of zoological nomenclature (words added at the Monaco Congress of 1972 indicated by square brackets):

> "Article 11 b. *Language*. The name must be either Latin or latinized, [or treated as such,] or if an arbitrary combination of letters, must be so constructed that it can be treated as a Latin word.
>
> "[(ii). A word of Greek or non-classical origin (including an arbitrary combination of letters) is treated as latinized for purposes of zoological nomenclature if it is written in Latin letters even if the ending is not latinized.]"

This merely rephrases in more explicit terms, provisions making Latin the language of nomenclature, contained in the Règles Internationales (1902) and previous zoological codes. So far as gender endings are concerned under the Code words of Greek origin are no different from words derived from modern languages of Indo-European stock [Arts. 30 a(i)(3) and (4) and 30 b(i)].

5. Admittedly Art. 30, dealing with gender, in its proem does not expressly say that it refers only to Latin adjectives (or those with latinized endings), but it is necessarily so limited. It reads "if an adjective in the nominative singular, must agree in gender with the generic name with which it is at any time combined, and its termination must be changed, if necessary". Surely it could not have been intended to apply to adjectival names with other than latinized endings. If Art. 30 is not deemed so qualified, zoologists will have to vary endings to comply with gender changes not only of Greek but of Russian, German, French, Spanish, Czech , Hindi, etc., and even of non-Indo-European languages. Plainly Art. 30 must be read qualified by Art. 11 b and other Code provisions.

For example, Arts. 30 a(i) (3) and (4), and 30 b(i), dealing with the determination of gender of genera, treat words derived from Greek and from modern Indo-European languages similarly. Moreover, regardless of original Greek gender *Latin gender* controls if the termination is latinized [Art. 30 a(i)(3)].

6. It would be undesirable to amend the Code to change the generally accepted nomenclatural rules making only Latin controlling (dating back at least to the 19th century) so as to give Greek adjectival gender *changes* special status.

a. The number of zoologists today who study classical Greek grammar is very small, and is becoming smaller.

b. The rules for changing the endings of Greek adjectives for gender are either unclear or not uniform. For example, in cases of compound adjectives (and a large proportion, possibly most, of the adjectival species-group names of Greek origin are compounds) alteration for gender agreement apparently was optional or applied only in some cases. Certainly zoological usage even in the pre-Règles days usually did not involve change from masculine (or neuter) to feminine when a generic shift occurred. For example, the well-known American avian species, the Scarlet Tanager, was for a century known as *Piranga erythromelas* (Vieillot), although the generic name was plainly feminine and *-melas* was the masculine of a Greek adjective. (Today another specific name is used.) Were the Code to be changed to provide for adoption of Greek gender endings, a definite arbitrary rule would have to be adopted to cover all Greek compounds. And what of the many compounds that are part Latin and part Greek?

c. Other problems would also arise. Surely fully latinized Greek words (with Latin endings) would continue to be treated as if Latin. But what of *partly* latinized Greek words - probably a majority of species-group names of Greek origin? Some Greek sounds do not exist in Latin, so the mere transposition into Latin letters involves latinization as Code Art. 11 b indicates. Further, Appendix B to the Code (pp. 94 et seq.) makes a distinction between "transliteration" and "latinization". For example, the Greek letter "K", is "transliterated" as "k" ("leukos"), but in zoological nomenclature is usually "latinized" as "c" ("leucos"); the Greek diphthong "AI" is "transliterated" as "ai" ("melaina"), but is usually "latinized" as "ae" ("melaena") (see Code Appendix pp. 95, 98). Other cases (there are many) are indicated by "eruthros" (transliteration), "erythros" (partial latinization), "erythrus" (complete latinization). If the Code was amended to provide for Greek gender declension for adjectives, in which situation should Greek endings be required so that termination change is compelled?

7. While I have not attempted to make a count, it is my impression that in ornithology change of termination to conform with Greek gender ending has been infrequent, except occasionally as to the irregular adjective *melas*, whose feminine gender, in its partly latinized form, *melaena*, looks like a Latin word. The usual Greek adjectival gender changes from the masculine - os to - e (feminine), and - on (neuter) (e.g., leukos, leuke, leukon) are rarely made, - at least since the adoption of the Règles. Indeed such changes would have been (in my opinion) contrary to both the Règles and the Code, as well as earlier national codes. Prior to the Règles Internationales of 1905 many zoologists felt free to follow their own rules of nomenclature, so it is not surprising that some cases can be cited (far from general or consistent) in which Greek paradigms were adopted on generic shift. But such cases can have no weight in construing the Code in the face of the plain language of the Code making Latin the sole language of nomenclature and providing that words derived from other languages are accepted only on the stated basis that they are "treated as latinized" [Arts. 11 b and 11 b(ii)].

8. The Commission is therefore requested to grant:

a. The Opinion sought by the applicant.

b. The Declaration sought by the applicant, modified to the extent that the proem of Article 30 (lines 1-2) shall substitute "a Latin adjective or adjective with latinized termination" in place of "an adjective".

(2) Reply by R.K. Brooke (*Durban Museum, Smith Street, Durban 4001, R.S.A.*)

1. Dr. Eisenmann has courteously sent me an advance copy of his comments on unlatinized adjectival species-group names which he has discussed with breadth and insight. He is quite right in saying that my proposed amendment to the proem of Article 30 of the International Code of Zoological Nomenclature is too restrictive. On the other hand I consider that his proposed amendment is perhaps too widely or loosely worded. If his proposed Example, or something like it, is not included in the Code, his amendment would mean that *Melaenornis pammelaina* usu auctorum plurimum would have to become *Melaenornis pammelainus* in terms of the to be amended proem of Article 30, as read with Article 30a(i) Examples, since *pammelaina* could be regarded as an adjective with a latinized termination. *Pammelainus* has no justification in Ancient Greek or Classical Latin: it is a barbarous hybrid which outrages the sensibilities of anyone with a knowledge of ancient languages.

2. I think that Dr. Eisenmann's proposed Example might be reworded for clarity as follows:-
Examples. - Adjectives derived from languages other than Latin, -

(i) if they have latinized terminations (e.g. *erythroleucus* (m.), *glauca* (f.), *phoeniceum* (n.)), undergo the same changes of termination to ensure agreement in gender with whatever generic name they may be combined with as Latin adjectives with the same terminations;

(ii) if without latinized terminations (e.g. *erythroleucos, glauce, phoeniceon, melas, melaina, melaena, melan*) keep their terminations as originally proposed (cf. Article 32a) regardless of gender terminations in the language of origin.

3. I support Dr. Eisenmann's proposed amendment to the proem of Article 30 together with the proposed Example in which it is clearly stated that species-group names ending in *-melaina* or *-melaena* are not to be regarded as adjectives with latinized terminations.

ADDITIONAL FACTS IN THE CASE OF *PHAROPTERYX BENOIT* RÜPPELL, 1852 (PISCES). Z.N.(S.) 1981

By E. Tortonese (*Museo Civico di Storia Naturale, 16121 Genoa, Italy*

My original application for the suppression of *Pharopteryx benoit* Ruppell, 1852, was published in *Bull. zool. Nomencl.* vol.29: 39-40. In *Bull.* vol.31. 172, I revised my proposals and asked that the specific name *benoit* be placed on the Official List with precedence after *kleinenbergi* Giglioli 1889 (*Eretmophorus*) for all zoologists who hold that both names apply to the same species.

2. I had originally supposed that *Pharopteryx* Rüppell, 1852, was undoubtedly a junior homonym of *Pharopteryx* Rüppell, 1828. But although the junior name was clearly proposed as new for a different nominal genus, the homonymy of the two names is not so clear.

3. *Pharopteryx* Rüppell, 1828 (Reise (Senck. nat. Ges.), Fische, vol.4(10): 15) is spelt *Pharopterix* in the same work in the Explanation of Plate 4 and in the Index, p.143. It is therefore necessary to determine how the first reviser rule applies to the two original spellings: for if *Pharopterix* is the correct original spelling, then *Pharopteryx* Rüppell, 1852, is not a junior homonym, and the generic name *Eretmophorus* Gigliolo, 1889, falls as a junior synonym along with its associated specific name *kleinenbergi*.

4. *Pharopteryx* Rüppell, 1828, was soon recognised to be a synonym of *Plesiops*, Oken, 1817 and thus never came into use - and it may have been for that reason that Rüppell thought himself justified in proposing the name anew in 1852. The name has, however, been used as valid by several authors in the present century who regarded *Plesiops* as invalid because they attributed it to Cuvier (properly Schinz *in* Cuvier), 1822, who published it without any included species, which was once upon a time regarded by some authors as a fatal defect in a name. I have found three uses of *Pharopteryx* and one of *Pharopterix*, as follows:

Pharopteryx Jordan, D.S. & Seale, A., 1905. List of fishes collected by Dr. Bashford Dean on the island of Negros, Philippines. *Proc. U.S. nat. Mus.*, vol.28: 769-803 (:781)

Pharopteryx Jordan & Seale, 1906, The fishes of Samoa. *Bull. U.S. Bur. Fish.*, vol.25 (for 1905): 173-455 (:260)

Pharopteryx Everman & Seale, 1907, *Bull. U.S. Bur. Fish.*, vol.26 (no. 607): 51-110 (: 78)

Pharopterix Weber & Beaufort, 1929, *Fishes Indo-Australian Archipelago*, vol.5: 374.

However, although each of the two original spellings has been adopted as a valid name, none of the above authors has cited both spellings nor given any direct evidence of intention to reject either of them.

5. The relationship between *Pharopteryx* Rüppell, 1828 and *Plesiops* is one of subjective synonymy and has to all intents and purposes been resolved by the rejection (since 1929) of the former as a junior synonym of the latter. At the same time, no purpose would be served by allowing *Eretmophorus* Giglioli, 1889 to be displaced by *Pharopteryx* Rüppell, 1852, although that would be technically possible if some zoologist were to declare, acting as first reviser, that *Pharopterix* is the correct original spelling for Rüppell's 1828 name.

6. Since, so far as I can ascertain, no such first reviser action has ever been taken for that name, I hereby choose *Pharopteryx* as the correct original spelling, and ask that the following proposals be added to those published in *Bull.* vol.31: 172:

(3) to place on the Official Index of Rejected and Invalid Generic Names in Zoology

(a) *Pharopterix* Rüppell, 1828, an incorrect original spelling of *Pharopteryx* Rüppell, 1828;

(b) *Pharopteryx* Rüppell, 1852, a junior homonym of *Pharopteryx* Rüppell, 1828

7. It should be noted that the question of *Pharopteryx* Rüppell, 1852, versus *Eretmophorus* Giglioli, 1889, is quite independent of the question of *benoit* Rüppell, 1852 versus *kleinenbergi* Giglioli, 1889. The two questions ought therefore to be voted upon independently of each other.

8. I am grateful to Dr. Alwyne Wheeler for help in tracing the references cited in this note.

COMMENT ON THE PROPOSALS CONCERNING *NOTOZUS* FÖRSTER, 1853 (HYMENOPTERA: CHRYSIDIDAE). Z.N.(S.) 2109

(1) by L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

(see *Bull.* vol.32: 181-187)

I should like to know who is the author who first validly selected a type-species for *Notozus*. Ashmead (1902), it is stated, selected a species that was not among those originally included in the genus so that his selection is invalid. If there is a valid type-selection, and if this is of a species which is congeneric with *Chrysis panzeri* Fabricius, then there is no need to set such a selection aside under the plenary powers, as requested in para. (1) (a) on p. 184. If a species not congeneric with *Chrysis panzeri* has been validly selected, this should have been stated and the consequences discussed. If, finally, no valid selection of type-species for *Notozus* has ever been made, then the author can himself designate *N. frivaldskii* (a junior synonym of *Chrysis panzeri*) as such, without the help of the Commission, and certainly without recourse to the plenary powers.

If there are two uses for a generic name, and the correct use (here the use by North American authors of *Elampus* for the genus often referred to as *Notozus*) is rather widespread, I should be in favour of following the Code and use the generic name *Elampus* in its correct sense. The only argument which might, in my opinion, justify the suppression of *Elampus* is that it has been used for two different genera so that there is confusion about what the name stands for. From the application I get the impression that one of the two usages (the European) is of the names *Notozus* and *Omalus* for the two genera, and the other (the North American) of *Elampus* and *Omalus* for the same genera, so that there will not be confusion if *Elampus* is used in the nomenclaturally correct sense.

(2) Reply to Dr. Holthuis by Dr. Huber

I intended to say in my original application that Förster (1853) established *Notozus* for *Chrysis panzeri* and five new species. That is why I proposed that species, and not its junior synonym *N. frivaldskii*, for designation as type-species. I asked for the plenary powers to be used to that effect because of the possibility that an overlooked valid type-designation is lurking undiscovered in the literature. But if Dr. Holthuis is able to assure me that there is no such designation, then I will withdraw that part of my application.

The generic name *Elampus* is indeed used for two different genera, and it is the confusing situation that arises from this which caused me to appeal to the Commission in the first place. North American authors use it (alongside *Omalus*) for the genus which most European authors call *Notozus*; furthermore, the genus which North American authors call *Omalus* is called *Ellampus* [sic] by European authors (alongside *Notozus*). Thus the usage of both *Notozus* and *Omalus* needs stabilizing; and this is most readily achieved by getting rid of *Elampus* / *Ellampus*. The European usage is exemplified by the works of Berland & Bernard (1938: 25, 26, 31); Semenov-Tian-Shanskij (1967: 119, 120); and Du Buysson (1891: 94, 95, 116). This is the main reason why I asked for the suppression of *Elampus*; other reasons are given in the application.

(3) by D.S. Peters (*Forschungsinstitut Senckenberg, Senckenberganlage 25, 6 Frankfurt-M, Germany*

I support the proposal of J.T. Huber because it serves stability and clarity of nomenclature. Of course, *Elampus* Spinola, 1806, has priority, but it has been used in such inconsistent ways that its retention would lead directly to the danger of further misunderstandings. The other arguments in the proposal speak for themselves.

OPINION 1055

GRYLLUS HIEROGLYPHICUS JOHANNES MUELLER (PHYSIOLOGIST), 1826 (INSECTA: ORTHOPTERA): SUPPRESSED UNDER THE PLENARY POWERS

RULING. - (1) Under the plenary powers the specific name *hieroglyphicus* Johannes Mueller (Physiologist), as published in the binomen *Gryllus hieroglyphicus*, hereby ruled to be available from its first publication in 1826, is suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The specific name *hieroglyphicus* Klug, 1832, as published in the binomen *Decticus hieroglyphicus*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2570.

(3) The specific name *hieroglyphicus* Johannes Mueller (Physiologist), 1826, as published in the binomen *Gryllus hieroglyphicus*, and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Names in Zoology with the Name Number 1008.

HISTORY OF THE CASE Z.N.(S.)1870

On 30 December 1968 a paper was received from Dr. K. McE. Kevan (*Macdonald College, McGill University, Canada*) in which he pointed out the unfortunate confusion surrounding the names originally published as *Gryllus hieroglyphicus* Johannes Mueller (Physiologist), 1826, and *Decticus hieroglyphicus* Klug, 1832. Both these nominal species are now referred to the genus *Poekilocerus* Audinet-Serville, 1831. Mueller's name was thought by Dr. Kevan not to have been made avaliable in 1826. If that was the case, then the name would date from another work by Mueller, 1828. In that event, the name would almost certainly apply to a different species from that described in 1826 (which is that described by Klug in 1832 and which has always been known by the name *hieroglyphicus*) and much confusion would result. It seems likely that Mueller, who had received his material from Klug, muddled the material from different localities. Dr. Kevan therefore asked that Mueller's works published in 1826 and 1828 be suppressed for the purposes of zoological nomenclature.

Dr. Kevan's paper was sent to the printer on 24 January 1969 and was published on 12 May 1969 in *Bull. zool. Nomencl.* vol.26: 54-56. Support was expressed by Dr. K.H.L. Key (*Canberra, Australia*). Public notice of the possible use of the plenary powers was given in the same part of the *Bulletin* and to the other prescribed serials (Constitution Art. 12b: *Bull. zool. Nomencl.*, vol.31: 97) and to eight entomological serials.

On 29 October 1970 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (70) 35 for or against Dr. Kevan's proposals set out in *Bull. zool. Nomencl.*, vol.26: 55. Because of a strike by British postal workers, the voting period was extended to 31 March

1971, and on that date the state of the voting was as follows:

Affirmative Votes - thirteen (13) received in the following order: Melville, Mayr, Lemche, Holthuis, Brinck, Obruchev, Eisenmann, Bonnet, Vokes, Tortonese, Jaczewski, Starobogatov, Ride.

Negative Vote - one (1): Simpson

Late Affirmative Votes - three (3): Alvarado, Binder, Forest.

Late Negative Vote - one (1): Sabrosky

Voting Papers not returned - two (2): Kraus, Munroe.

The following comments were sent in by members with their Voting Papers:

Simpson: Kevan has made out an adequate case regarding *hieroglyphicus*, but has provided no details warranting suppression of the two publications.

Eisenmann: I am willing to vote for suppression of Mueller's *Gryllus hieroglyphicus* so as to ensure the priority and thus maintain usage of Klug's *Decticus hieroglyphicus*, but I am not willing to suppress all names in Mueller's two books without knowing more about them.

Ride: In voting for the proposal I assume that the Secretary is in agreement with para. 8 of the submission, and that he would have commented if he was not.

Sabrosky: I have no objection to suppressing *Gryllus hieroglyphicus* Mueller, but I cannot vote to suppress whole works without seeing the evidence of what names are involved, and what they entail.

In view of these comments no Opinion was then prepared to give effect to the vote taken by the Commission. It was not until much later that I found time to review the file, and on 7 November 1974 I wrote to Dr. Kevan as follows:

"The main object of your application was to conserve *Decticus hieroglyphicus* Klug, 1832, from the threat presented to it by *Gryllus hieroglyphicus* Mueller, 1826 and 1828. Some of the members of the Commission objected at deciding on the total suppression of the two works for the sake of a single name, without further information on the content of those works, and on the importance of any other names they might contain. This seems to me a reasonable enough objection."

I went on to say that Mueller's 1826 work contained a large number of names. Some appeared to be new; others might be either new names or unjustified emendations or erroneous subsequent spellings of earlier ones. One at least was a nomen nudum. Most of the names, however, if new, were provided with enough description to make them available, even though the work was primarily a physiological one. Mueller's 1828 work contained, apart from *Gryllus hieroglyphicus*, only one ostensibly new name, namely *Mantis aegyptiaca*. I explained that it was quite beyond the resources of the Commission's office to verify the nomenclatural and taxonomic status of all the names involved. I then put to Dr. Kevan the following three options (not counting persisting with the original proposal): (1) to get or procure a determination of which of Mueller's names are really new, with an

assessment of their status as synonyms or valid names; the Commission could then vote either on the names themselves or on the works as a whole in the light of fuller information; (2) to withdraw, at any rate for the time being, the application for total suppression of the works so that I could ask the Commission to vote for or against accepting the vote already taken as one for the suppression of *Gryllus hieroglyphicus* alone; (3) to let the case drop.

In his reply received on 2 December 1974, Dr. Kevan said: "If it is simpler to tackle the publications piecemeal, as, when and if the need arises, this would seem the best thing to do. I am quite prepared to withdraw the blanket part of the application. All that I feel is needed is to eliminate *Gryllus hieroglyphicus* Mueller, 1826 and 1828 for the reasons already given. I think that zoologists should by now be alerted to the fact that Mueller had been overlooked as a describer of species and that problems other than the one I discovered might occur."

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75) 1 on this problem. A note circulated with the voting paper summarised the history of the case as set out above, and ended:

"I therefore suggest that the best course of action would be to regard the vote taken on V.P.(70)35 under the plenary powers as a vote only for the suppression of *Gryllus hieroglyphicus* Mueller, and for the placing of that specific name on the Official Index of Rejected and Invalid Names in Zoology. However, that course involves cancelling the earlier vote insofar as it was concerned with the suppression of Mueller's works of 1826 and 1828. It also seems desirable to remove any ambiguity as to the date when Mueller's name became available by declaring it to have been made available in 1826. These propositions are set out in the accompanying voting paper."

Voting Paper (75) 1 thus contained four separate questions. These, and the state of the voting on each of them at the close of the Voting Period on 16 September 1975, were as follows:

Vote 1: for or against cancelling the vote taken under the plenary powers in V.P.(70)35 for the suppression for the purposes of zoological nomenclature of the works of Johannes Mueller (Physiologist), 1826 and 1828.

Affirmative votes - twenty-one (21) recieved in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Mayr, Holthuis, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bernardi, Bayer, Habe, Nye.

Negative votes - none (0).

Late affirmative vote - one (1): Kraus.

Leave of Absence - two (2): Brinck, Erben.

Voting papers not returned - two (2): Simpson, Heppell.

Vote 2: for or against ruling that the specific name *hieroglyphicus* was

made available in the binomen *Gryllus hieroglyphicus* by Johannes Mueller (Physiologist) in 1826.

Affirmative votes - nineteen (19) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Mayr, Holthuis, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkwski, Binder, Corliss, Ride, Bernardi, Bayer, Habe, Nye.

Negative votes - two (2): Rohdendorf, Alvarado.

Late affirmative vote - one (1): Kraus.

Leave of Absence - two (2): Brink, Erben.

Voting papers not returned - two (2): Simpson, Heppell.

Vote 3: for or against taking the vote under the plenary powers in V.P.(70)35 as a vote solely for the suppression of the specific name *hieroglyphicus* Johannes Mueller (Physiologist), 1826, as published in the binomen *Gryllus hieroglyphicus* for the purposes of both the Law of Priority and of the Law of Homonymy.

Affirmative votes - nineteen (19) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Mayr, Holthuis, Vokes, Starobogatov, Tortonese, Sabrosky, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bayer, Habe, Nye.

Negative votes - two (2): Mroczkowski, Bernardi.

Late affirmative vote - one (1): Kraus.

Leave of Absence - two (2): Brinck, Erben.

Voting papers not returned - two (2): Simpson, Heppell.

Vote 4: for or against placing the specific name *hieroglyphicus* Johannes Mueller, 1826 (Physiologist), as published in the binomen *Gryllus hieroglyphicus*. and as suppressed under the plenary powers in V.P.(70)35, on the Official Index of Rejected and Invalid Specific Names in Zoology.

Affirmative votes - nineteen (19) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Mayr, Holthuis, Vokes, Starobogatov, Tortonese, Sabrosky, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bayer, Habe, Nye.

Negative votes - two (2): Mroczkowski, Bernardi.

Late affirmative vote - one (1): Kraus.

Leave of Absence - two (2): Brink, Erben.

Voting papers not returned - two (2): Simpson, Heppell.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and Index by the ruling given in the present Opinion:

hieroglyphicus, Decticus, Klug, 1832, *Symbolae physicae, seu icones et descriptiones insectorum,* &c, *in* Hemprich & Ehrenberg, *Symbolae physicae,* (Zool.) Vol.2 (Insecta 3), sign. *f,* fol. (1-2), pl. 25.

hieroglyphicus, Gryllus, Johannes Mueller (Physiologist), 1826, *Zur vergleichenden Physiologie des Gesichtsinnes des Menschen und der Thiere nebst einem Versuch über die Bewegung der Augen und über den menschlichen Blick,* pp. 332, 355, 358, 437. Leipzig.

CERTIFICATE

I certify that the votes cast on Voting Papers (70)35 and (75)1 were cast as set out above, that the proposals contained in those voting papers have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1055.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
24 October 1975

OPINION 1056

EUDYPTES ATRATUS FINSCH, 1875 EX HUTTON MS. (AVES): SUPPRESSED UNDER THE PLENARY POWERS

RULING. - (1) Under the plenary powers, the specific name *atratus* Finsch, 1875, ex Hutton MS., as published in the binomen *Eudyptes atratus,* is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology:

(a) *sclateri* Buller, 1888, as published in the binomen *Eudyptes sclateri* (Name Number 2571);

(b) *robustus* Oliver, 1953, as published in the binomen *Eudyptes robustus* (Name Number 2572).

(3) The specific name *atratus* Finsch, 1875, ex Hutton MS., as published in the binomen *Eudyptes atratus,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1009.

HISTORY OF THE CASE Z.N. (S.) 1893

An application in the present case was received from Dr. George E. Watson (*National Museum of Natural History, Washington, D. C.*) on 7 July 1969. It was sent to the printer on 26 August 1969 and eventually published on 8 December 1971 in *Bull. zool. Nomencl.* vol.28: 92-93, in a form which reflected views expressed by Dr. Charles Vaurie and Dr. Eisenmann. Public notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serials (Constitution Art. 12b; *Bull zool Nomencl.* vol.31: 97) and to nine ornithological serials. A comment by Dr. Lemche was published in *Bull.* vol.29: 43. His approach was supported by Dr. Falla, Dr. Warham and Dr. Fleming, all of New Zealand, (*Bull.* vol.30: 136) and accepted by Dr. Watson (*Bull.* Vol.31: 64).

DECISION OF THE COMMISSION

On 16 June 1975, the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75) 2 for or against the proposals set out in *Bull.* vol.28: 92-3, as modified by those set out in *Bull.* vol.29: 43. At the close of the voting period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - sixteen (16) received in the following order:
Eisenmann, Melville, Lemche, Willink, Holthuis , Vokes, Mayr, Tortonese, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Habe, Bayer.

Negative votes - five (5) received in the following order:
Dupuis, Starobogatov, Sabrosky, Bernardi, Nye.

Late affirmative vote - one (1): Kraus.

Leave of absence - two (2): Brinck, Erben.

Voting papers not returned - two (2) : Simpson, Heppell.

The following comments were sent in by members with their voting papers.

Melville: I vote with some misgivings on this case. Now that the label "nomen dubium" has been firmly tied round the neck of *E. atratus,* it should be left to wither away naturally.

Dupuis: J'entends réagir vigoureusement contre la fâcheuse tendance actuelle à couper la nomenclature de ses sources historiques (propositions de suppressions des ouvrages les plus classiques, e.g. Lacépède, 1789, cf. *Bull.* vol.29: 44-61, 1972; méconnaissance des paternités réelles des noms, e.g. *Bull.* vol.32: 6, 57, 1975) et je refuse donc de voter sur un "wording" qui ne se refère pas explicitement à *Eudyptes atratus* Hutton *in* Finsch, 1875, ou *Eudyptes atratus* Finsch, 1875, ex Hutton MS.

Sabrosky: I would have voted for Watson's original proposal, but I do not agree with Lemche's modification. The name *atratus* is still lingering about for purposes of homonymy, and the peculiar combination of characters should permit it to be identified if such a rare species does indeed exist somewhere. I see no reason to reject potentially usable names, even if the likelihood of use is small.

Bernardi: J'estime que voter "pour" revient à dissimuler un problème taxonomique non résolu par un artifice de nomenclature: l'*Eudyptes atratus* est peut-être une espèce subfossile, par exemple. Il vaut mieux admettre qu'il existe actuellement un nomen dubium (*atratus*) et ne pas employer ce nom, ce qui conduit au même résultat que celui demandé par Watson et Lemche, sans faire intervenir la Commission.

Nye: I would have been willing to vote in favour of Dr. Watson's original proposal to give *E. sclateri* and *E. robustus* nomenclatural precedence over *E. atratus,* but I am not willing to vote for the suppression of a subjective synonym, when the desired aim can be achieved by the other method.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and Index by the ruling given in the present Opinion:

atrata [sic], *Eudyptes,* Finsch, 1875, ex Hutton MS., *Ibis:* 114.

robustus, Eudyptes, Oliver, 1953, *Emu,* vol.53: 185-187.

sclateri, Eudyptes, Buller, 1888, *History of Birds of New Zealand,* vol.2, plate facing p. 294.

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 2 were cast as set out above, that the proposal contained in that voting paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1056.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
24 October 1975

OPINION 1057

DONAX VARIABILIS SCHUMACHER, 1817 (MOLLUSCA: BIVALVIA) SUPPRESSED UNDER THE PLENARY POWERS; TYPE-SPECIES DESIGNATED FOR *LATONA* SCHUMACHER, 1817.

RULING: - (1) Under the plenary powers

(a) the specific name *variabilis*, Schumacher, 1817, as published in the binomen *Donax variabilis*, is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy;

(b) all designations of type-species hitherto made for the nominal genus *Latona* Schumacher, 1817, are hereby set aside, and the nominal species *Donax cuneatus* Linnaeus, 1758 is hereby designated to be the type-species of that genus.

(2) The generic name *Latona* Schumacher, 1817 (gender: feminine), type-species, by designation under the plenary powers in (1) (b) above, *Donax cuneatus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2027.

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *cuneatus* Linnaeus, 1758, as published in the binomen *Donax cuneatus* (specific name of type-species, by designation under the plenary powers in (1) (b) above, of *Latona* Schumacher, 1817) (Name Number 2573);

(b) *variabilis* Say, 1822, as published in the binomen *Donax variabilis* (Name Number 2574).

(4) The specific name *variabilis* Schumacher, 1817, as published in the binomen *Donax variabilis* and as suppressed under the plenary powers in (1) (a) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1010.

HISTORY OF THE CASE Z.N. (S.) 1923

An application for the validation of *Donax variabilis* Say, 1822 was received from Dr. Kenneth J. Boss (*Museum of Comparative Zoology, Cambridge, Mass., U.S.A.*) on 6 March 1970. It was sent to the printer on 10 March 1970 and published on 23 December 1970 in *Bull. zool. Nomencl.*, vol.27: 205-6. Public notice of the possible use of the plenary powers in the present case was given in the same part of the Bulletin as well as to the prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.*, vol.31: 97) and to four malacological serials. No comment was received.

DECISION OF THE COMMISSION

On 4th January 1973 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (72) 21 for or against the proposals published in *Bull. zool. Nomencl.*, vol.27: 205. At the close of the Voting Period on 4 April 1973 the state of the voting was as follows:

Affirmative votes - twenty-two (22) received in the following order: Melville, Holthuis, Munroe, Lemche, Mayr, Sabrosky, Eisenmann, Vokes, Habe, Rohdendorf, Starobogatov, Binder, Tortonese, Bayer, Brinck, Bernardi, Simpson, Ride, Corliss, Alvarado, Nye, Willink

Negative vote - one (1): Dupuis

Late affirmative votes - two (2): Heppell, Kraus

Voting Paper not returned - one (1): Erben

Two members of the Commission (Professor Vokes and Dr. Ride) sent in comments with their Voting Papers. These were published on 28 June 1974 in *Bull. zool. Nomencl.*, vol.30: 137 in a note in which the Secretary pointed out that the vote on Voting Paper (72) 21 had left the nominal genus *Latona* Schumacher, 1817, without a type-species. The valid name for that species (*variabilis* Schumacher) was fortunately not in doubt, for it had always been known under the older name of *cuneatus* Linnaeus, 1758; but the use of the plenary powers would be necesary to make that nominal species the type-species of *Latona*. Public Notice of the possible use of the plenary powers to this further extent was given in the same part of the *Bulletin* as well as to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.*, vol.31: 97) and to four malacological serials. No comment was received.

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75) 3 for or against the proposals published in *Bull. zool. Nomencl.*, vol.30: 137. At the close of the Voting Period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - twenty-one (21) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Habe, Ride, Bernardi, Bayer, Nye

Negative votes - none (0)

Late affirmative vote - one (1): Kraus

Leave of absence - two (2): Brinck, Erben

Voting Papers not returned - two (2): Simpson, Heppell.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the ruling in the present Opinion:

cuneatus, Donax, Linnaeus, 1758, *Syst. Nat.* ed. 10 (vol.1): 683

Latona Schumacher, 1817, *Essai d'un nouveau système des vers testacés* (Copenhague): 156

variabilis, Donax, Schumacher, 1817, *Essai d'un nouveau système des vers testacés* (Copenhague): 156

variabilis, Donax, Say, 1822, *Jour. Acad. nat. Sci. Philadelphia,* vol.2: 305.

CERTIFICATE

I certify that the votes cast on Voting Papers (72) 21 and (75) 3 were cast as set out above, that the proposals contained in those Voting Papers have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1057.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
30 October 1975

OPINION 1058

SUPPRESSION OF *PAPILIO ACTAEON* FABRICIUS, 1775 (LEPIDOPTERA)

RULING: - (1) Under the plenary powers, the specific name *actaeon* Fabricius, 1775, as published in the binomen *Papilio actaeon,* is hereby suppressed for the purposes of both the Law of Priority and the Law of Homonymy.

(2) The specific name *acteon* von Rottemburg, 1775, as published in the binomen *Papilio acteon,* is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2575.

(3) The specific name *actaeon* Fabricius, 1775, as published in the binomen *Papilio actaeon,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1011.

HISTORY OF THE CASE Z.N. (S.) 1937

An application for the suppression of *Papilio actaeon* Fabricius, 1775, was received from Mr. N.D. Riley and Mr. L.G. Higgins on 6 August 1970. It was sent to the printer on 26 October 1970 and published on 10 August 1971 in *Bull. zool. Nomencl.*, vol.28: 53-55. Public notice of the possible use of the plenary powers was given in the same number of the *Bulletin* as well as to the other prescribed serials (Constitution Art 12b, *Bull. zool. Nomencl.*, vol.31: 97) and to eight entomological serials. The application was supported by Dr. Harry K. Clench (*Carnegie Museum, Pittsburgh, U.S.A.*), Mr. G.E. Tite (*British Museum, Natural History*), Colonel S.S.Nicolay (*Virginia, U.S.A.*), Monsieur Henri Stempffer (*Muséum National d'Histoire Naturelle, Paris*) and Dr. Lee D. Miller (*Allyn Museum of Entomology, Sarasota, Florida, U.S.A.*).

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75) 4 for or against the proposals published in *Bull. zool. Nomencl.*, vol.28: 55. At the close of the Voting Period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - twenty-one (21) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bernardi, Bayer, Habe, Nye.

Negative votes - none (0)

Late affirmative vote - one (1): Kraus

Leave of absence - two (2): Brinck, Erben

Voting Papers not returned - two (2): Simpson, Heppell.

In returning his Voting Paper, Dr. Sabrosky remarked: "It should be noted that these two names were homonyms also under the old Rules, Art. 35a, and not merely under the new Code".

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and Index by the ruling given in the present Opinion:
actaeon, Papilio, Fabricius, 1775, *Systema Entomologiae* App. 829
acteon, Papilio, von Rottemburg, 1775, *Der Naturforscher,* vol.6: 30

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 4 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1058.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
30 October 1975

OPINION 1059

SUPPRESSION OF *CALAMOPORA* GOLDFUSS, 1829 (ANTHOZOA, TABULATA)

RULING.- (1) Under the plenary powers the generic name *Calamopora* Goldfuss, 1829, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) The generic name *Palaeofavosites* Twenhofel, 1914 (gender: masculine), type-species, by original designation, *Favosites asper* d'Orbigny, 1850, is hereby placed on the Official List of Generic Names in Zoology with the Name Munber 2028;

(3) The following specific names are placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *asper* d'Orbigny, 1850, as published in the binomen *Favosites asper* (specific name of type-species of *Palaeofavosites* Twenhofel, 1914) (Name Number 2576);

(b) *alveolaris* Goldfuss, 1829, as published in the binomen *Calamopora alveolaris* (Name Number 2577);

(4) The generic name *Calamopora* Goldfuss, 1829, as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2073.

HISTORY OF THE CASE Z.N.(S.)1961

An application for the suppression of the generic name *Calamopora* Goldfuss, 1829 so as to conserve *Palaeofavosites* Twenhofel, 1914 (Anthozoa Tabulata) was received from Dr. Klemens Oekentorp (*Westfälische Wilhelms-Universität, Münster in Westfalen, Germany*) on 10 March 1971. It was sent to the printer for publication on 23 September 1971 and was published on 31 December 1971 in *Bull. zool. Nomencl.* vol.28: 158-160. Public notice of the possible use of the plenary powers in the present case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art. 12b; *Bull. zool. Nomencl.* vol.31: 97) and to two palaeontological serials.

No comment was received, but a list of references satisfying the requirements of Article 79b was published in *Bull. zool. Nomencl.* vol.31: 112-113.

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper(75) 8 either for or against the proposals set out in *Bull. zool. Nomencl.* vol.28: 159. At the close of the voting period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - sixteen (16), received in the following order: Eisenmann, Melville, Lemche, Willink, Holthuis, Mayr, Vokes,

Starobogatov, Tortonese, Binder, Corliss, Alvarado, Ride, Bernardi, Bayer, Habe

Negative votes - four (4), received in the following order: Dupuis, Sabrosky, Rohdendorf, Nye

Voting Papers not returned - two (2), Simpson, Heppell

Late affirmative vote - one (1), Kraus

Leave of Absence - two (2), Brinck, Erben.

Dr. Mroczkowski voted for proposals (1), (2) and (4), but against proposal (3).

The following comments were sent in by members of the Commission with their Voting Papers:

Dr. Dupuis: En l'absence de tout commentaire de la part des spécialistes, j'estime devoir respecter le Code.

Dr. Sabrosky: The situation is so straightforward and without confusion that I cannot believe the consequences would be "chaotic".

Dr. Mroczkowski: As the generic names *Calamopora* and *Palaeofavosites* are only subjective synonyms, I vote for (1), (2) and (4) and against (3). If in the future zoologists come to treat *alveolaris* Goldfuss, 1829 as belonging to a genus distinct from *Palaeofavosites*, the generic name *Calamopora* should be restored.

Dr. Rohdendorf: I vote against Dr. Oekentorp's proposals because they are against the purposes of the Law of Priority.

Dr. Nye: I am unwilling to vote in favour of the proposals as they stand for two reasons.

First, Dr. Oekentorp states that *Calamopora* "has not been used for more than 50 years in connection with the description of a species". What is actually required under Article 79b is "that the senior name is not known to have been used" during this period. This small but important technicality requires further clarification.

Secondly, even if it could be shown that *Calamopora* has not been used as a valid name, I am unwilling to suppress a subjective synonym when the desired aim can be achieved by ruling that *Palaeofavosites* should be given nomenclatural precedence over *Calamopora* by any zoologist who treats them as congeneric.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the Ruling given in the present Opinion:

alveolaris, Calamopora, Goldfuss, 1829, *Petrefacta Germaniae*, vol.1. (2): 77

asper, Favosites, d'Orbigny, [1850], *Prodrome de paléontologie stratigraphique universelle*, vol.1: 49

Calamopora Goldfuss, 1829, *Petrefacta Germaniae*, vol.1 (2): 77

Palaeofavosites Twenhofel, 1914, *Geol. Surv. Canada, Mus. Bull.* III, Geol. Ser. vol.19: 24

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 8 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1059.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 January 1976

OPINION 1060

SUPPRESSION OF *DIOMEDEA LEPTORHYNCHA* COUES, 1866 (AVES)

RULING.- (1) Under the plenary powers, the specific name *leptorhyncha* Coues, 1866, as published in the binomen *Diomedea leptorhyncha,* is hereby suppressed for the purposes of the Law of Priority, but not for those of the Law of Homonymy.

(2) The specific name *irrorata* Salvin, 1883, as published in the binomen *Diomedea irrorata,* is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2578.

(3) The specific name *leptorhyncha* Coues, 1866, as published in the binomen *Diomedea leptorhyncha,* and as suppressed under the plenary powers in (1) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1012.

HISTORY OF THE CASE Z.N. (S.) 1947

An application for the suppression of the specific name *Diomedea leptorhyncha* Coues, 1866, was received from Dr. George E. Watson (*U.S. National Museum, Washington D.C.*) on 30 November 1970. After some correspondence it was sent to the printer on 8 July 1971 and published on 8 December 1971 in *Bull. zool. Nomencl.* vol.28: 106. Public notice of the possible use of the plenary powers was given in the same number of the *Bulletin* and to the other prescribed serials (Constitution Article 12b; *Bull. zool. Nomencl.* vol.31: 97) and to nine ornithological serials. No comment was received.

Before it was possible to bring the case to a vote, the International Congress of Zoology (Monaco, 1972) adopted the amendments to Articles 23 and 79 of the Code that are published in *Bull. zool. Nomencl.* vol.31: 79-81 and 87-89. Dr. Watson was accordingly asked to provide a list of references to establish a prima facie case for his application under Article 79. This he did, and the list was published on 31 July 1974 in *Bull. zool. Nomencl.* vol.31: 8 (this was inadvertently given as : 64 on the Voting Paper which was sent to members of the Commission).

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were asked to vote under the Three-Month Rule on Voting Paper (75) 5 for or against the proposals set out in *Bull. zool. Nomencl.* vol.28: 106. At the close of the Voting Period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - twenty (20) received in the following order : Eisenmann, Melville, Lemche, Willink, Dupuis, Holthuis, Vokes, Starobogatov, Mayr, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Habe, Ride, Bernardi, Bayer

Negative vote - one (1): Nye

Late affirmative vote - one (1): Kraus

Leave of Absence - two (2): Brinck, Erben

Voting Papers not returned - two (2): Simpson, Heppell.

The following comments were sent in by members of the Commission with their Voting Papers:

Melville: If the name *Diomedea leptorhyncha* is unused it is because it is a nomen dubium. Suppressing it will not do any harm, but is in principle an act of supererogation.

Bernardi: "Pour", parce que le type de *Diomedea leptorhyncha* est un exemplaire immature.

Nye: I should be willing to vote in favour of a ruling that *D. irrorata* should be given nomenclatural precedence over *D. leptorhyncha* by any person who treats them as conspecific, but I am not willing to vote for the suppression of a subjective synonym when the desired aim can be achieved by the other method.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List and Index by the ruling given in the present Opinion:

irrorata, Diomedea, Salvin, 1883, *Proc. zool. Soc. London:* 430

leptorhyncha, Diomedea, Coues, 1866, *Proc. Acad. nat. Sci. Philadelphia,* vol. 18: 178.

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 5 were cast as set out above, that the proposal set out in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1060

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
31 October 1975

OPINION 1061

DESIGNATION OF TYPE-SPECIES FOR *HOMOCERAS* HYATT, 1884 (CEPHALOPODA)

RULING.- (1) Under the plenary powers, all designations of type-species for the nominal genus *Homoceras* Hyatt, 1884 (Class Cephalopoda) hitherto made are set aside and the nominal species *Goniatites smithii* Brown, 1841, is designated as type-species of that genus.

(2) The generic name *Homoceras* Hyatt, 1884 (gender: neuter), type-species, by designation under the plenary powers in (1) above, *Goniatites smithii* Brown, 1841, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2029.

(3) The specific name *smithii* Brown, 1841, as published in the binomen *Goniatites smithii* (specific name of type-species of *Homoceras* Hyatt, 1884) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2579.

HISTORY OF THE CASE Z.N. (S.) 1963

An application from Dr. W.H.C. Ramsbottom (*Institute of Geological Sciences, Leeds, England*) for the use of the plenary powers to designate a type-species for *Homoceras* Hyatt, 1884, was received on 2 July 1970. It was sent to the printer on 8 July 1971 and was published on 31 December 1971 in *Bull. zool. Nomencl.* vol.28: 161-163. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* and was sent to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol.31: 97) and to two palaeontological serials. No comment was received, in spite of efforts by the Secretariat and the applicant to elicit some.

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75) 10 for or against the proposals set out in *Bull. zool. Nomencl.* vol.28: 163. At the close of the Voting Period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - nineteen (19) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Corliss, Alvarado, Ride, Bayer, Habe, Nye

Negative votes - two (2): Rohdendorf, Bernardi

Voting Papers not returned - two (2): Simpson, Heppell

Late Affirmative Vote - one (1): Kraus

Leave of Absence - two (2): Brinck, Erben

The following comments were sent in by members of the Commission with their voting papers:

Dupuis: L'importance du nom *Homoceras* est clairement présentée et il

me paraît en effet préférable de changer l'espèce-type du genre que de désigner un néotype toujours plus ou moins contestable pour l'espèce de Hyatt.

Rohdendorf: I vote against Ramsbottom's proposals. It is impossible to ignore the laws of zoological nomenclature for the purposes of stratigraphy. The genus *Homoceras* Hyatt, 1884, has as type-species *G. calyx* Phillips, 1836 (by monotypy!), and this excludes all other considerations.

Corliss: The proposal *seems* logical; yet is there a precedent? Is there a danger in setting one? Or - as I believe - is not plenary-power usage on a case-by-case basis, independent of past decisions?

Bernardi: Je trouve préférable de désigner un néotype pour *G. calyx* Phillips.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the ruling given in the present Opinion:

Homoceras Hyatt, 1884, *Proc. Boston. Soc. nat. Hist.* vol.23: 330

smithii, Goniatites, Brown, 1841, *Trans. geol. Soc. Manchester,* vol.1:218

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 10 were cast as set out above, that the proposals contained in that Voting Paper have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1061.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
2 February 1976.

OPINION 1062

ANOBIUM FABRICIUS, 1775: *GRYNOBIUS* THOMSON, 1859: *PRIOBIUM* MOTSCHULSKY, 1845 (COLEOPTERA): DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS

RULING:- (1) Under the plenary powers, all designations of type-species hitherto made for the three nominal genera listed below are set aside, and the nominal species here listed with those generic names are hereby designated as their type-species:

(a) for *Anobium* Fabricius, 1775, *Ptinus punctatus* de Geer, 1774;

(b) for *Grynobius* Thomson, 1859, *Anobium excavatum* Kugelann, 1791;

(c) for *Priobium* Motschulsky, 1845, *Anobium carpini* Herbst, 1793.

(2) The following generic names are hereby placed on the Official List of Generic Names in Zoology, with the Name Numbers specified:

(a) *Anobium* Fabricius, 1775 (gender: neuter), type-species, by designation under the plenary powers in (1) (a) above, *Ptinus tectus* de Geer, 1774 (Name No. 2030);

(b) *Grynobius* Thomson, 1859 (gender: masculine), type-species, by designation under the plenary powers in (1) (b) above, *Anobium excavatum* Kugelann, 1791 (Name No. 2031);

(c) *Priobium* Motschulsky, 1845 (gender: neuter), type-species, by designation under the plenary powers in (1) (c) above, *Anobium carpini* Herbst, 1793 (Name No. 2032).

(3) The following specific names are hereby placed on the Official List of Specific Names in Zoology, with the Name Numbers specified:

(a) *tectus* de Geer, 1774, as published in the binomen *Ptinus tectus* (specific name of type-species, by designation under the plenary powers in (1) (a) above, of *Anobium* Fabricius, 1775) (Name No. 2580);

(b) *excavatum* Kugelann, 1791, as published in the binomen *Anobium excavatum* (specific name of type-species, by designation under the plenary powers in (1) (b) above, of *Grynobius* Thomson, 1859) (Name No. 2581);

(c) *carpini* Herbst, 1793, as published in the binomen *Anobium carpini* (specific name of type-species, by designation under the plenary powers in (1) (c) above, of *Priobium* Motschulsky, 1845) (Name No. 2582).

HISTORY OF THE CASE Z.N. (S.) 1989

An application from Dr. Richard E. White (*U.S. National Museum, Washington D.C. 20560, U.S.A.*) for the designation of type-species for three genera of Anobiid beetles based on misidentified type-species was received on 15 December 1971. It was sent to the printer on 13 April 1972 and published on 30 November 1972 in *Bull. zool. Nomencl.* vol.29: 145-146. Public Notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the other prescribed serial publications (Constitution Art 12b; *Bull. zool. Nomencl.* vol.31: 97) and to

eight entomological serials. The application was supported by Dr. E.J. Ford, jr. (*U.S. Agricultural Quarantine Inspection, Baltimore, Md., U.S.A.*) and Dr. F. Espanol (*Museo de Zoologia, Barcelona, Spain*). No adverse comment was received.

DECISION OF THE COMMISSION

On 16 June 1975 the Members of the Commission were invited to vote on Voting Paper (75) 13 for or against the proposals set out in *Bull. zool. Nomencl.* vol.29: 146. At the close of the voting period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - twenty (20), received in the following order: Eisenmann, Melville, Lemche, Willink, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bernardi, Bayer, Habe, Nye

Negative vote - one (1): Dupuis

Voting Papers not returned - two (2): Simpson, Heppell

Late affirmative vote - one (1): Kraus

Leave of Absence - two (2): Brinck, Erben

The following comments were made by members of the Commission in returning their votes:

Lemche: These are three independent cases and ought to have been presented separately for voting. Fortunately, they all seem in order.

Dupuis: L'identité des espèces proposées comme types à désigner n'est pas véritablement discutée, mais admise d'après des synonymies plus ou moins classiques.

Holthuis: I am not very happy with the presentation of this case, as there is no indication of the consequences of the use of (a) the nominal species cited by the authors, or (b) the actual species that they had before them.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the Ruling given in the present Opinion:

Anobium Fabricius, 1775, *Systema Entomologiae...*: 62

carpini, Anobium, Herbst, 1793, in Jablonsky, *Natursystem aller* bekannten...Insekten...Der Käfer (5): 58

excavatum, Anobium, Kugelann, 1791, (Schneider's) *Neues Mag. für die Liebhaber Ent.* vol.4: 488

Grynobius Thomson, C.G., 1859, *Skandinaviens Coleoptera,* vol.1: 89

Priobium Motschulsky, 1845, *Bull. Soc. imp. Nat. Moscou,* vol.18: 45

punctatus, Ptinus, de Geer, 1774, *Mém. Ins.* vol.4: 230.

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 13 were cast as set out above, that the proposals contained in that Voting Paper have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is

truly recorded in the present Opinion No. 1062.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
3 February 1976

OPINION 1063

LECHRIODUS BOULENGER, 1882 (AMPHIBIA SALIENTIA): DESIGNATION OF TYPE-SPECIES

RULING:- (1) It is hereby ruled that the type-species of *Lechriodus* Boulenger, 1882, by monotypy, through *Batrachopsis* Boulenger, 1882, is *Asterophrys melanopyga* Doria, 1875.

(2) The generic name *Lechriodus* Boulenger, 1882 (gender: masculine), type-species, by monotypy, through *Batrachopsis* Boulenger, 1882, *Asterophrys melanopyga* Doria, 1875, is herby placed on the Official List of Generic Names in Zoology with the Name Number 2033.

(3) The specific name *melanopyga* Doria, 1875, as published in the binomen *Asterophrys melanopyga,* (specific name of type-species, by monotypy, through *Batrachopsis* Boulenger, 1882, of *Lechriodus* Boulenger, 1882) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2583.

HISTORY OF THE CASE Z.N.(S.) 1991

An application for the designation of a type-species for the nominal genus *Lechriodus* Boulgener, 1882 was received from Dr. Richard G. Zweifel (*American Museum of Natural History, New York, N.Y., U.S.A.*) on 24 January 1972. It was sent to the printer on 13 April 1972 and published on 30 November 1972 in *Bull. zool. Nomencl.* vol.29: 147-148. The application was supported by Mr. A. Stimson (*British Museum, Natural History*).

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote on Voting Paper (75) 14 for or against the proposals set out in *Bull. zool. Nomencl.* vol.29: 148. At the end of the Voting Period on 16 September 1975 the state of the voting was as follows:

Affirmative votes - twenty (20) received in the following order: Eisenmann, Melville, Lemche, Willink, Dupuis, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Sabrosky, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bernardi, Bayer, Nye

Negative vote - one (1): Habe

Voting Papers not returned - two (2): Simpson, Heppell

Late affirmative vote: one (1) Kraus

Leave of Absence - two (2): Erben, Brinck

Dr. Habe sent in the following comment with his negative vote: The type-species of *Batrachopsis* Boulenger and hence *Lechriodus* Boulenger should be *Lechriodus platyceps* Parker = *Batrachopsis melanopyga* Doria, 1875, sensu Boulenger, 1882.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the Ruling given in the present Opinion:

Lechriodus Boulenger, 1882, *Cat. Batrachia Gradientia Caudata:* 116 *melanopyga, Asterophrys,* Doria, 1875, *Ann. Mus. civ. Stor. nat. Genova* vol.6: 355-356.

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 14 were cast as set out above, that the proposals set out in that Voting Paper have been duly adopted and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1063.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
3 February 1976

OPINION 1064

PTENURA TEMPLETON, 1844; *CRYSTALLINA, PODURA,* MÜLLER, 1776 (COLLEMBOLA): SUPPRESSED UNDER THE PLENARY POWERS

RULING:- (1) The following names are hereby suppressed under the plenary powers, for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) the generic name *Ptenura* Templeton, 1844;

(b) the specific name *crystallina* Müller, 1776, as published in the binomen *Podura crystallina.*

(2) The generic name *Heteromurus* Wankel, 1860 (gender: masculine), type-species, by monotypy, *Heteromurus margaritarius* Wankel, 1860, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2034.

(3) The specific name *margaritarius* Wankel, 1860, as published in the binomen *Heteromurus margaritarius* (specific name of type-species, by monotypy, of *Heteromurus* Wankel, 1860) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2584.

(4) The generic name *Ptenura* Templeton, 1844, as suppressed under the plenary powers in (1) (a) above, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2074.

(5) The specific name *crystallina* Müller, 1776, as published in the binomen *Podura crystallina,* and as suppressed under the plenary powers in (1) (b) above, is hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Number 1013.

HISTORY OF THE CASE Z.N. (S.) 2000

An application for the suppression under the plenary powers of *Ptenura* Templeton, 1844 and *crystallina, Podura,* Müller, 1776 was received from Dr. Peter Bellinger (*San Fernando Valley State College, California, U.S.A.*) and Dr. Willem N. Ellis (*University of Amsterdam, Netherlands*) on 27 March 1972. It was sent to the printer on 20 September 1972 and published on 29 December 1972 in *Bull. zool. Nomencl.* vol.29: 212-214. Public Notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the other prescribed serials (Constitution Art. 12b; *Bull.* vol.31, p.97) and to seven entomological serials. The application was supported by Dr. Kenneth Christiansen (*Grinnell College, Grinnell, Iowa*) and Dr. P.N. Lawrence (*British Museum, Natural History*). The applicants provided a list of references showing that the case is covered by the provisions of Art 79b, as follows:

BARRA, J.A., 1968. Contribution à l'étude du genre *Heteromurus* Wankel, 1860 (Collemboles). *Biol. gabon.* vol.4(1): 105-117

DENIS, J.R., 1931. Contributo alla conoscenza del "Microgenton" di Costa Rica, II. *Boll. Lab. Zool. gen. agr. R. Scuola agric. Portici* vol.25: 69-170

ELLIS, W.N., 1974. The spring fauna of Collembola (Insecta) from Rhodos, with description of some new taxa. *Beaufortia* vol.22(292): 105-152
GISIN, H., 1960. *Collembolenfauna Europas.* Mus. Hist. nat. Genève, 312 pp., Geneva.
MARTYNOVA, E.F., CHELNOKOV, V.G. & RASULOVA, Z.K., 1974. Species of the genus *Heteromurus* Wankel, 1860 (Collembola, Entomobryidae, s.1.) in the U.S.S.R. fauna. *Vest. Zool.* 1974 (2): 66-71
MAYNARD, E.A., 1951. *A monograph of the Collembola or springtail insects of New York State,* xxii + 339 pp. Ithaca
NOSEK, J., 1969. The investigation on the apterygotan fauna of the Low Tatras. *Acta Univ. carol. (Biol.)* 1967 (5-6): 349-528
PACLT, J., 1961. Collembola from the Azores and Madeira, collected by the Lund University expedition in 1957. *Acta ent. Mus. nat. Pragae* vol.34: 221-240
STACH, J., 1955. Skoczogonki-Collembola. *Klucze Oznazc. Owad. Pol.* vol.7: 1-215
STRINATI, P., 1966. Faune cavernicole de la Suisse, (1). *Annls. Spéléol.* vol.21 (1): 5-355.

The applicants were made aware of Dr. Nye's comment (*Bull.* vol.30: 140-141) but still requested that the names concerned should be suppressed under the plenary powers and placed on Official Indexes.

DECISION OF THE COMMISSION

On 16 June the members of the Commission were invited to vote on Voting Paper (75) 15 for or against the proposals set out in *Bull. zool. Nomencl.* vol.29: 213-214. At the end of the Voting Period on 16 September 1975, the state of the voting was as follows:

Affirmative votes - seventeen (17), received in the following order: Eisenmann, Melville, Lemche, Willink, Holthuis, Mayr, Vokes, Starobogatov, Tortonese, Mroczkowski, Binder, Rohdendorf, Corliss, Alvarado, Ride, Bernardi, Habe

Negative votes - four (4): Dupuis, Sabrosky, Bayer, Nye

Voting Papers not returned - two (2): Simpson, Heppell

Late affirmative vote - one (1): Kraus

Leave of Absence - two (2): Brinck, Erben

The following comments were sent in by members of the Commission with their voting papers:

Dr. Lemche: I prefer suppression of old unidentified names instead of permitting them to continue troubling working taxonomists - see *Bull. zool. Nomencl.* vol.29:43.

Dr. Dupuis: Le cas n'est pas clair est l'importante "note to accompany" aurait dû être publiée. Si "not all specialists agree that the concept *nitidus*... is the same as that of *margaritarius*", il peut exister deux genres différents fondés sur l'un et sur l'autre.

Dr. Sabrosky: Nine out of ten of the references cited were published years after Salmon's admittedly "valid resurrection" of *Ptenura* and his valid

designation of type-species, which should have been followed.

Dr. Bayer: I agree with the view of Dr. Nye that it is undesirable to place suppressed senior subjective synonyms on the Official Indexes and, accordingly, have voted against this proposal.

Dr. Nye: The first requirement for a case under Article 79b is that the senior name is not known to have been used in the immediately preceding fifty years. The proposers detail the correct use of *Ptenura* as a valid name by Salmon in 1945 and in his later papers including his systematic catalogue of 1964. It cannot therefore be argued that *Ptenura* is an unused or forgotten name.

ORIGINAL REFERENCES

crystallina, Podura, Müller, 1776, *Zool. Dan. Prodr.:* 184
Heteromurus Wankel, 1860, *Lotos* Jahrg. 10: 203
margaritarius, Heteromurus, Wankel, 1860, *Lotos* Jahrg. 10: 203
Ptenura Templeton, 1844, *Trans. ent. Soc. London* vol.3: 306

CERTIFICATE

I certify that the votes cast on Voting Paper (75) 15 were cast as set out above, that the proposal set out in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1064.

R. V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
9 February 1976

REVIVED PROPOSALS FOR STABILIZING NAMES IN THE *TIPULA OLERACEA* SPECIES-GROUP (DIPTERA: TIPULIDAE) Z.N. (S.) 896

By A.M. Hutson, R.I. Vane-Wright and P.S. Cranston
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At the request of the Secretary of the International Commission, we here review the history of this case since it was first presented to the Commission twenty years ago. We also review usage of names for the three species involved and present precise proposals in the hope that this important case can at last be brought to a conclusion. It was first brought forward by Dr. A.M. Hemmingsen (*Strödam Biological Laboratory*) and Dr. Henning Lemche (*Universitetets Zoologiske Museum, Copenhagen*) from Denmark in 1955, and their paper was finally ready for the printer by the end of 1956. For reasons which cannot now be unravelled, but which must include the elaborate preparations for the London (1958) International Congress of Zoology, it was not sent to the printer until October 1959 and was published on 8 April 1960 in *Bull. zool. Nomencl.* vol.17: 209-213.

2. In their paper Dr. Hemmingsen and Dr. Lemche clearly expounded the nomenclatural problems associated with the three species concerned, which were referred to in their paper, in subsequent comments on it, and are here referred to, by the letters A, B and C. The heart of the problem is to decide which, if any, of these species is to bear the name *Tipula oleracea* Linnaeus, 1758 - the nominal type-species, by subsequent designation by Latreille, 1810, *Consid. gén. Anim. Crust.*, of *Tipula* Linnaeus, 1758. The three species differ in their morphology (see Hemmingsen & Lemche, *op. cit.*), in their geographical distribution and in their ecology and behaviour. All, but especially sp. B, are pests through the activity of the larvae ("leather-jackets") which eat the subterranean and lower aerial parts of a wide variety of plants; in fact, out of over 13,000 described species of TIPULIDAE, these are virtually the only species that have any significant impact on man.

3. Sp. A is mainly a middle and southern European and North African species, uncommon in more northerly latitudes, and not known in Sweden north of the province of Skåne. In particular, it is not known as far north as Uppsala which, according to Tjeder (1961, *Bull. zool. Nomencl.*, vol.19: 132) must be considered as the type-locality of *T. oleracea* and from where (*ibid.*) he proposed a neotype. Both Tjeder and Borg (*ibid:* 129-131), however, give strong circumstantial evidence for the view that the species known to Linnaeus must have been sp. B. Sp. A is recorded as a pest from France, Britain, Turkey, Russia, Austria and Germany.

4 Sp. B occurs throughout Europe from the Canary Islands and east to about 40° E and up to 65° N. It has been established in Newfoundland and Nova Scotia for some time and is rapidly spreading in British Columbia and Washington. It is in fact responsible for about 98 per cent of outbreaks of *Tipula* and is the only one known to occur as a pest in Sweden. It is recorded as a major pest in the lands around the North Sea, including S. Sweden and

E. Britain; a frequent, if sporadic pest in a belt around this area including western Britain and parts of central Europe including the Baltic States as well as in North America. It is a minor pest in the rest of its range.

5. Sp. C ranges eastwards from the Atlantic seaboard of Europe, but not into the Mediterranean peninsulas, and about as far north as sp. B. It becomes the commonest species of the group in eastern regions and, as *T. subcunctans* Alexander, continues across to the Pacific coast. It is hardly known as a pest except in Germany, where its effects are serious, but it may have been under-estimated in other areas because its flight period overlaps with the last part of that of sp. B.

6. The specific names available for these three species are as follows, in order of priority (all were proposed in combination with the generic name *Tipula*):

(1) *oleracea* Linnaeus, 1758, *Syst. Nat.* (ed. 10), vol.1: 585.
The Linnean collection contains a single male which (contrary to the statement of Hemmingsen & Lemche quoting Mannheims, 1952, TIPULIDAE, *in* Lindner, *Fliegen palaearkt. Reg.* (15): 76) bears the reference number "4" and the name "*oleracea*". There is no intrinsic reason to doubt that this is the type-specimen of Linnaeus. Its genitalia have been dissected and it is unquestionably a specimen of species C.

(2) *fimbriata* Meigen, 1818, *Syst. Beschr. zweifl. Ins.*, vol.1: 190. As Mannheims (quoted by Hemmingsen & Lemche) showed in 1952: 78, this is unquestionably species B. The name has never, however, come into general use.

(3) *paludosa* Meigen, 1830, *Syst, Beschr. zweifl. Ins.*, vol.6: 289. This is another name for the species B, and Hemmingsen & Lemche proposed that it should be used as the valid name. It is, however, a junior primary homonym of *Tipula paludosa* Fabricius, 1794, *Ent. Syst.*, vol.4: 239, which is itself an unused junior synonym of *T. bimaculata* Linnaeus, 1766 and which lacks a type-specimen.

(4) *fusca* Staeger, 1840, *Naturhist. Tidsskr.* vol.3 (1): 14. As Mannheims (quoted by Hemmingsen & Lemche) showed in 1952: 81, this is species C. The name was thought to be preoccupied by *"Tipula fusca"* de Geer, 1773, *Nova Acta Uppsal.:* 66, but that is a non-binominal name. It is, however, unquestionably a junior homonym of *Tipula fusca* Bloch, 1776, *Beschaft. berlin. Ges. naturf. Fr.*, vol.2: 175. This name applies to a fossil insect in amber, certainly a Dipteran, and probably a Sciarid. It seems unlikely that this insect will ever be identified at specific level or that a specific name will ever be needed for it, but in that event it would not be placed in the genus *Tipula*.

(5) *subcunctans* Alexander, 1921, *Ann. ent. Soc. Am.*, vol.14: 127. This is species C. Doubt exists as to whether it denotes a separate subspecies from the following.

(6) *czizeki* de Jong, 1925, Een Studie over Emelten en haare bestrijding, *Verh. Mededeel. Plantenz. Dienst Wageningen:* 42. This is species C and is the name generally used in both taxonomic and applied

literature in Europe.

(7) *submendosa* Tjeder, 1941, *Opusc. Entom.*, vol.6:62. This was proposed for species A (*oleracea* auctorum) on the grounds that it was extremely unlikely to be the species that was before Linnaeus, and that *oleracea* had never been used for that species in Sweden.

7. Until the work of de Jong in 1925, the species A and B were widely confused in the literature. Unfortunately, in providing a sound basis for all subsequent taxonomic interpretations, he renamed the wrong species; for he applied *oleracea* to species A and proposed the new name *czizeki* for species C. His usage of the names, which has been generally followed in all countries (including the other Scandinavian countries) except Sweden was:

Species A	*oleracea* Linnaeus, 1758
Species B	*paludosa* Meigen, 1803 (*non* Fabricius, 1794)
Species C	*czizeki* de Jong, 1925 (except where *subcunctans* Alexander is used)

In Sweden, however, the usage is:

Species A	*submendosa* Tjeder, 1941
Species B	*oleracea* Linnaeus, 1758
Species C	*fusca* Staeger, 1840 or *czizeki* de Jong, 1925

8. Since the publication of Hemmingsen & Lemche's application in 1961 (*Bull.* vol.17:209-213), published comments (*Bull.* vol.18:129-135, 145; vol.20:304; vol.31:5-8) have centred mainly on whether the name *oleracea* is to be applied to species A or to species B. The first is contrary to the circumstantial evidence but is supported by a very large majority of the numerous works on these insects - mainly of a non-taxonomic nature. The second is supported by the circumstantial evidence but is upheld by usage in Sweden alone. Neither position is in conformity with the evidence of the specimen which must be accepted, in the absence of evidence to the contrary, as Linnaeus's type.

9. In view of the different uses of the specific name *oleracea*, Professor Per Brinck suggested (*Bull.* vol.18:135) that the name be dropped altogether and that the following usage be adopted:

Species A	*submendosa* Tjeder, 1941
Species B	*paludosa* Meigen, 1830
Species C	*fusca* Staeger or *czizeki* de Jong.

This suggestion was, however, rejected by Dr. Lemche (*Bull.* vol.31:6). Other comments published with Dr. Lemche's include one from Dr. Alexander protesting at the proposal by Hemmingsen & Lemche to suppress *Tipula subcunctans* and a protest by Dr. Bo Tjeder against the proposal to regard *T. paludosa* Fabricius, 1794, as a nomen dubium. We also commented at that time in support of Hemmingsen & Lemche.

10. We think it is worth repeating two points before proceeding further. First, we see no point in using the plenary powers to resurrect the junior primary homonym *T. fusca* Staeger, 1840 for sp. C. This can either be called *oleracea* if the re-identification of a 250-year old type-specimen is adopted;

or it can continue to be called *czizeki* de Jong, which has been the name used for it ever since de Jong worked out the taxonomy in 1925, either as an independent species or as a subspecies of *subcunctans* Alexander, 1921. At present most authors regard them as separate species - if only for convenience. Certainly stability would not be served by suppressing *subcunctans* in favour of *czizeki.* Here it would be helpful if the Commission were to rule that the Law of Priority is to apply to those two names whenever they are used at the same level in the species-group. Secondly, no purpose would be served by allowing the senior subjective synonym *Tipula fimbriata* Meigen, 1818 to claim its right of validity over *T. paludosa* Meigen, 1830. That would lead to a gross disturbance of usage in the countries other than Sweden, while in Sweden it would not be any more welcome than *T. paludosa* as a substitute for *T. oleracea* as a name for Species B.

11. We now turn to the evidence of usage in recent years and claim that this is overwhelmingly in favour of the proposals of Hemmingsen and Lemche. The *Review of Applied Entomology,* Series A, vols 48-60, 1960-1972, lists many references of which the 44 tabulated below are relevant:

sp. A as *oleracea*	sp. B as *paludosa*	sp. C as *czizeki*
13	30	1

There are a further 20 references to the *T. oleracea*-group. Papers using the above nomenclature originated from Great Britain (25), Germany (5), U.S.A. (5), Canada (5), Russia (2), France (2), Italy (1), Czechoslovakia (1). There are 14 references to *Tipula* virus, especially in sp. B under the name *T. paludosa,* from the U.S.A. and Britain. No references from Scandinavia are given in that period. The references in question all deal with papers published in periodicals.

12. The following is a by no means exhaustive list of books and papers showing the variety of fields in which the nomenclature advocated by Hemmingsen & Lemche has been used (only one - Borg, 1952 - is of Swedish origin, and in that the name *paludosa* was used for Species B).

General textbook of agricultural entomology	Smith, K.M., 1931. *A textbook of agricultural entomology.* Cambridge. 285 pp.
Garden pests	Westcott, C., 1973. *The gardener's bug book.* New York. 689 pp.
Virology	Carter, J.B., 1973. *J. invert. Path.,* vol.21: 123-130, 136-143
Entomophagous fungi	Muller-Kagler, E., 1965. *Z. agnew. Ent.,* vol.55: 409-418
Bacteria	Huglar, A., 1959. *J. Insect Path.,* vol.1: 60-66

Myiasis	Guegan, J., 1970. *Ann. Parasit. hum. comp.* vol.45: 243-246
Nematology	Lam, A.B.Q. & Webster, J.M., 1972a. *J. invert. Path.*, vol.20: 141-149; 1972b, *Can. ent.*, vol.104: 899-902
Food of vertebrates	Dunnett, G.M., 1955. *Ibis*, vol.97: 624-628; King, B., 1972, *British Birds* (Oct. 1972); Loi, I., 1965. *Circ. Oss. Mal. Piante*, Sez. Ent.: 5
Cytogenetics	papers in *Chromosoma*, vols 7, 8, 12, 13
Histology	Bauer, H., 1932, *Z. wiss. Zool.*, vol.143: 53-76
Ecology	Barnes, H.F., 1937. *Ann. appl. Biol.*, vol.24: 356-368; Freeman, B.E., 1964. *J. anim. Ecol.*, vol.33: 129-140; 1967, *ibid*, vol.36: 123-146; 1968, *ibid*, vol.37: 339-362; 1972, *ibid*, vol.41: 537-551
Population studies	Dunnett, *op cit;* Milne, R., Laughlin, R. & Coggins, R.E., 1965. *J. anim. Ecol.*, vol.34: 529-534
Life-cycle: eggs	Meats, A., 1968. *Proc. r. ent. Soc.*, A. vol.43: 85-88; Hemmingsen, A.M., 1952. *Vidensk. Meddr. dansk. naturh. Foren.*, vol.114: 365-430
larvae	Brindle, A., 1957. *Ent. mon. Mag.*, vol.93: 202-204, *Trans. Soc. br. Ent.*, vol.14: 63-114; Loi, *op cit;* Savtchenko, E.N., 1961. *Fauna SSR*, vol.2: 1-486; 1966, *Fauna Ukrainii*, vol.14: 1-548; Theowald, Bro., 1967. *BestimmBüch Bodenfauna Europ., 7;* Lam & Webster, 1972, *opp. cit;* Laughlin, R., 1960. *Ent. exp. app.*, vol.3: 185-197; 1967, vol.10: 52-68; Meats, *op cit.*
pupae	The same authors; Coulson, J.C., 1962, *J. anim. Ecol.*, vol.31: 1-19.

The species have also been used as examples in models designed to test the relative importance of factors affecting their distribution and abundance, so as to define susceptible areas and predict outbreaks. In Britain, the Agricultural Research Council has organised conferences on Leatherjackets since 1967, and since 1972 a recording and ecological scheme has been working for amateurs and professionals alike, with participation of workers in other countries (about 80 zoologists are involved). A similar group has been set up in Yugoslavia. A number of key works or checklists have been published in recent years or are in process of

being published, e.g. Die Fliegen der Palaearktischen Region, Fauna U.S.S.R., Fauna Ukrainii, Fauna European S.S.R., Belgium/Holland Checklist, British Checklist, Czechoslovakia Checklist, Romania Checklist, Swedish Checklist, Yugoslav Checklist, North American Catalogue, and numerous more local faunal lists. In works of this category, the Sweden Checklist is almost the only one not to follow the nomenclature adopted by Mannheims, 1950, based on the work of de Jong, 1925, and proposed to the Commission by Hemmingsen & Lemche. It is worthy of note that the names *fimbriata, fusca, subcunctans* and *submendosa* were not used in the *Journal of Applied Entomology* in the period reviewed above.

13. It is only since 1941, when Tjeder realised, quite correctly, that the species called *oleracea* over most of Europe could not be the one described by Linnaeus that the problem of naming these species has become not only a taxonomic problem, enough in itself, but also a nomenclatural one. In Sweden, and in Sweden alone, an attempt has been made to interpret the names correctly, but even there usage has not been unanimous (see Borg, 1952), and the attempt was not consistent with the identity of the sole surviving Linnean specimen.

14. We therefore ask the Commission

(1) to use its plenary powers

(a) to set aside all designations of type-specimen for the nominal species *Tipula oleracea* Linnaeus, 1758, hitherto made and to designate as neotype of that species the male specimen of which the hypopygium was figured by Mannheims (1952, *in* Lindner, *Die Fliegen der Palaearkt. Reg.* (15): 77, fig. 39b, from Kochem/Mosel);

(b) to suppress the specific name *paludosa* Fabricius, 1794, as published in the binomen *Tipula paludosa,* for the purposes of both the Law of Priority and the Law of Homonymy;

(c) to suppress the specific name *fimbriata* Meigen, 1818, as published in the binomen *Tipula fimbriata*, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name *Tipula* Linnaeus, 1758 (gender: feminine), type-species, by subsequent designation by Latreille, 1810, *Tipula oleracea* Linnaeus, 1758, on the Official List of Generic Names in Zoology;

(3) to place the following specific names on the official List of Specific Names in Zoology:

(a) *oleracea* Linnaeus, 1758, as published in the binomen *Tipula oleracea,* and as defined by reference to the neotype designated under the plenary powers in (1) (a) above;

(b) *paludosa* Meigen, 1830, as published in the binomen *Tipula paludosa;*

(c) *czizeki* de Jong, 1925, and (d) *subcunctans* Alexander, 1921, each as published in combination with the generic name *Tipula,* with an endorsement that the Law of Priority is to apply when these names are held to denote a single taxon at the same level in the

species-group;

(4) to place the following species-group names on the Official Index of Rejected and Invalid Specific Names in Zoology:

(a) *paludosa* Fabricius, 1794, as published in the binomen *Tipula paludosa*, and

(b) *fimbriata* Meigen, 1818, as published in the binomen *Tipula fimbriata* as respectively suppressed under the plenary powers in (1) (b) and (c) above;

(5) to place on the Official List of Family-Group Names in Zoology the name TIPULIDAE (correction of Tipulariae) Latreille, [1802-1803], type-genus *Tipula* Linnaeus, 1758;

(6) to place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the name Tipulariae Latreille, [1802-1803], an incorrect original spelling of TIPULIDAE.

(NOTE. - The neotype proposed above was figured and described by Hemmingsen & Lemche in an appendix to their original application, 1960, *Bull. zool. Nomencl.*, vol.17: 209-213.)

REQUEST FOR THE DETERMINATION OF THE GENERIC NAMES OF THE BABOON AND THE MANDRILL (MAMMALIA: PRIMATES, CERCOPITHECIDAE). Z.N. (S.) 2093.

By E. Delson (*Department of Anthropology, Lehman College, City University of New York, Bronx, New York 10486, U.S.A.;* and P.H. Napier, *Department of Zoology, British Museum (Natural History), London, SW7 5BD, England*).

For nearly thirty years, since 1947 to be precise, the names of the common or "savannah" baboons and of the mandrill and drill (or "forest" baboons) have been in doubt. In the thirty years immediately prior to 1947, *Papio* Erxleben, 1777 was in general use for the savannah baboons and *Mandrillus* Ritgen, 1824 for the drill and mandrill, while during the preceding 20 years or so the two genera were usually united under the earlier name, *Papio*. Then in 1947 Hopwood (*Proc. zool. Soc. Lond.* vol.117: 533-6) drew attention to the generic name *Papio* Müller, 1776, used in combination with the specific name *sphinx* Linnaeus, 1758, usually considered a mandrill. From that time onwards it has been clear that the next available generic name for the savannah baboon (considered as a genus apart from the drill and mandrill) is *Chaeropithecus* Gervais, 1839. Nevertheless many authors have been loath to use the prior names valid under the International Code of Zoological Nomenclature, i.e. *Papio* for the drill and mandrill, and *Chaeropithecus* for the savannah baboons. They have continued to use invalid names in the interests of stability, on the grounds that they were more familiar both to primatologists and to general zoologists. It is to solve this problem - to weigh the claims of priority and usage - that two alternative proposals are submitted to the Commission with a request for a ruling.

2. The extant large terrestrial cercopithecoid monkeys of Africa can be divided into three groups, the gelada of the Ethiopian highlands; the forest-living mandrill and drill of equatorial West Africa; and the common or savannah baboon which ranges over most of sub-Saharan Africa and into Arabia in a wide spectrum of environments. Each of these animals has at one time or another been called a "baboon" in the vernacular; all have been studied from the viewpoints of systematics, ethology and palaeontology, and the savannah baboon in particular has been used extensively in medical research. It is generally agreed that the gelada is the most distinct of these forms, and most authors place it in the genus *Theropithecus* I. Geoffroy, 1843, a genus monotypic in the modern fauna. There is some doubt, however, about the savannah baboon and the mandrill, but discussion of this problem is hampered by lack of agreement on the correct scientific names for these animals. The history will be reviewed here as part of this request for a ruling from the Commission to provide a stable nomenclature.

3. *Simia sphinx* Linnaeus (1758: 25) was one of two forms included in his section of short-tailed *Simiae,* or *Papiones.* The description: *"Simia semicaudata, ore vibrissato, unguibus acuminatis"* was followed by references to the *Papio* of Gesner, Aldrovandus, Jonstonus and Ray. Linnaeus cited Gesner's page numbers incorrectly but on p.15 of the appendix to the latter's *Historia animalium de quadrupedibus viviparis,* vol.1 (1554) appears the figure of a large-headed stump-tailed animal, the *Papio,* that was exhibited in Augsburg in 1551. The description is almost non-existent, but Gesner mentions that it has digits on its four feet like those of the human hand. Contrary to the statements of Elliot (1909: 417) and Hill (1970: pl.16), it is not necessarily a mandrill since the most important diagnostic character of the mandrill, the longitudinally furrowed muzzle, is not mentioned in any of the descriptions of either Gesner (1606, *Thierbuch:* 157), Aldrovandus (1637, *Quad. digit. vivip:* 260), Jonstonus (1657, *Hist. nat. Quad:* 145) or Ray (1639, *Syn. meth. anim. Quad:* 158), nor is it discernible in the figure. On the other hand, in the 12th edition of 1766, after an amplified description of *Simia sphinx* and the addition of a reference to the *Papio* of Brisson (1756: 192) Linnaeus immediately goes on (p.35) to describe a new monkey, *Simia maimon,* undoubtedly a mandrill on account of its blue furrowed cheeks (*"genis caeruleis striatis"*). This suggests that the animal on which *Simia sphinx* is based could well have been a drill. Therefore if *Simia sphinx* is to be the type-species of either *Papio* Müller or *Mandrillus* Ritgen, its identity must be established once and for all by designating a neotype which, in the interests of stability, must be a mandrill.

4. Brisson's *Regnum Animale* of 1762, in which the name *Papio* also occurs (p.136), is virtually a reprint of his Latin text of 1756. In 1945, Tate (p.112) noted that Brisson's mammalian names had never been ruled upon by the International Commission on Zoological Nomenclature. Since the generic names from Brisson's *Ornithologia* (1760) had been accepted by the Commission (Opinion 37, replaced by Direction 16, 1955, *Opin. Decl. int. Commn zool. Nom.* vol.1C(C6): 81-8), there appeared to be a good case for the acceptance of the mammalian names from a basically similar work, and he requested that the matter be submitted to the Commission. Tate's application lapsed in 1963, when the Commission decided to close the files of all unpublished cases (*Bull. zool. Nomencl.* vol.20(2):81), and as no further application has since been made, the validity of the mammalian names from Brisson remains in doubt. *Papio* Brisson (1756, 1762) is based on *Simia sphinx* Linnaeus (1748: 3); on references to the *Papio* of Gesner, Jonstonus and Ray (either a drill or a mandrill, see para. 3), and on Kolbe's "Babouin" - the Chacma, a savannah baboon, *P. ursinus* (1719, *Caput. Bonae Spei hodiernum,* vol.3: 138).

5. Although Buffon and Daubenton (1766) did not use the binominal system of nomenclature, they added to the prevailing confusion in their chapters on

the *"Papion ou Babouin proprement dit."* Buffon (p.133) cited references to the *Papio* of Gesner, Jonstonus and Brisson, to Linnaeus' *Simia sphinx,* and (p.136-7) to the Chacma Baboon of Kolbe; and Daubenton added descriptions of savannah baboons– the reddish-brown *"Grand Papion"* (p.139-140, pl.13), the Guinea baboon; and the greenish-yellow *"Petit Papion"* (p.147, pl.14), probably the olive baboon, *Papio anubis*. Buffon did not recognise Gesner's *Papio* as either a drill or a mandrill, but rather as a savannah baboon to which whiskers had been added in error (footnote, p.133).

6. In 1773, Müller published the first volume (Säugenden Thiere) of his *Vollständiges Natursystem* which was based on Linnaeus's 12th edition (1766) and Houttuyn's *Natuurlyke Historie* (1761). Following Linnaeus he divided the genus *Simia* into three "subgenera": der Affen (*Simia*), Baviane (*Papio*) and Meerkatzen (*Cercopithecus*). In the subgenus *Papio,* Müller included the same group of short-tailed monkeys as Linnaeus in his group *Papiones,* namely *S. nemestrina,* the pig-tailed macaque; *S. apedia,* only recently identified as a squirrel monkey by Fooden (1966: 507-8); and *S. sphinx*. In the latter Müller included references to the *Papio* of Jonstonus and Ray (i.e. Gesner's *Papio* - either a drill or a mandrill, see para. 3). He also described its muzzle as ruffled or wrinkled ("Das Maul ist gleichsam gekräuselt oder runzlicht"), indicating that he took *S. sphinx* L., 1758, to be a mandrill. Hopwood (1947: 533) doubted the availability of *Papio* from Volume 1 (p.119) of Müller, 1773, but it satisfies the conditions of Articles 12 and 16 a (i) and (v) of the *International Code of Zoological Nomenclature.* On the other hand, he considered that the citation from the supplementary volume of 1776 was so phrased as to designate *S. sphinx* as the type-species of *Papio,* but since it does not comply with Article 69, no type-species was in fact designated.

7. Then Erxleben (1777, *Syst. regni. anim.*, vol.1:15) divided Linnaeus's genus *Simia* into five genera. The third genus, *Papio,* included five species: *P. sphinx* (Linnaeus, 1758); *P. maimon* (L., 1766) and *P. mormon* (Alströmer, 1776) (both mandrills); and *P. nemestrina* (L., 1766) and *P. apedia* (L., 1758) (a pig-tailed macaque and a squirrel monkey, as previously stated). None was selected as type. The first, *P. sphinx,* was based on a long list of references, beginning with Pliny. Of importance are citations of Gesner, Aldrovandus, Jonstonus, Ray and Linnaeus (1758 and 1766), all of which refer either to the drill or the mandrill. Erxleben also included references to savannah baboons, e.g. Kolbe's Chacma baboon (1719) as well as to the "Grand Papion" and "Petit Papion" of Buffon and Daubenton (1766), the Guinea and olive baboons respectively. Erxleben's description, however, is unequivocally of a Guinea baboon, the dark-reddish colour of the fur excluding any other savannah baboon; it appears to be taken mainly from that of the "Grand Papion" of Buffon and Daubenton (pp.137, 139-140), even down to his comment on the lack of whiskers (*"Os non vibrissatum*

secundum Buffonium uti Linneo."). In other words Erxleben's *Papio sphinx* L., 1758, is a composite; the references are to Gesner's doubtful drill/mandrill and to the savannah baboons, Chacma, Olive and Guinea, of Kolbe and Buffon,, while the description indicates the Guinea baboon. In *Papio sphinx* L., 1758, as interpreted by E. Geoffroy (1812: 103), slightly different ingredients produce the same result. Here the description is not completely conclusive and the type locality is given as "l'Afrique", but three of the six references are to the Guinea baboon (Schreber, ?1811: fig.13B; Audebert, 1799: 7; and Brongniart, 1792: 402-6, pl.21); two to both the Olive and Guinea baboons (Buffon and Daubenton, 1766, and Schreber, 1775: fig. 6) and the sixth is to *Simia sphinx* Linnaeus, 1766, i.e. to Gesner's drill/mandrill plus Kolbe's Chacma baboon (see paragraphs 3 and 4). Thus Erxleben's and Geoffroy's *Papio sphinx* are virtually identical.

8. After Geoffroy (1812) the use of the name *Papio* for the baboons seems to have lapsed temporarily. With the exception of Jardine (1833: pl.16) and Temminck (1853: 39), most 19th century authors employed *Cynocephalus* Geoffroy & Cuvier (1795, *Mag. encycl.* vol.3: 462), not realising that the name was preoccupied by *Cynocephalus* Boddaert (1768: 8, footnote), the Colugo or "Flying Lemur", and *Cynocephalus* Walbaum (1792: 579) a genus of fishes. It was not until 1893 that Thomas called attention to *Papio* as the earliest available name for the genus, and it was probably because of this that Forbes (1894: 253) used *Papio* Erxleben, 1777 for the baboons, drill and mandrill, designating as type-species *"P. sphinx* (Geoffr.)", the Guinea baboon. Unaccountably, however, neither *P. sphinx* (Linnaeus) Erxleben nor *S. sphinx* Linnaeus appears in Forbes' synonymy of this or any other species of baboon. In 1904, Palmer (p.511) cited Forbes as having fixed the type of *Papio* as *Papio sphinx* Erxleben, 1777 [sic] which suggests that he considered Geoffroy's usage to be merely a duplication of Erxleben's, as indeed it is (see para. 7). In this he was followed by Elliot (1913: 115) who gave the type of *Papio* as *"Papio sphinx* Erxleben (nec Linn.) = *Papio papio* Desmarest" (1820: 69). Desmarest's description is more precise than Geoffroy's, the type locality is given as "La côte de Guinée" and all six references are to the Guinea baboon. J.A. Allen (1925: 307) accepted this identification, but on the following page in his formal synonymy he inadvertently grouped *Papio sphinx* Erxleben with *Simia cynocephalus* Linnaeus (= *Cynocephalus babouin* Desmarest, the yellow baboon) rather than with *Cynocephalus papio.* Unfortunately this error was followed by G.M. Allen (1939: 160) and Hill (1970: 260).

9. After *Papio* Erxleben, the next available generic name for the savannah baboons is *Chaeropithecus* Gervais (1839: 90) which, as Ellerman & Morrison-Scott have shown (1951: 201), antedates that of Blainville, also in 1839. Thus under the present Code, *Chaeropithecus* Gervais is the earliest available name for the savannah baboons, with type designated by J.A. Allen (1925: 307) *Simia cynocephalus* Linnaeus, 1766, the yellow baboon.

10. Matschie & Zukowsky (1917: 470) appear to have been the first "modern" authors to separate the drill and mandrill from the savannah baboons under the generic name *Mandrillus* Ritgen, 1824. This was followed by J.A. Allen (1925: 311), Pocock (1926: 1408), G.M. Allen (1939: 157) and Hill (1970: 390), and today *Mandrillus* is the generally accepted generic name. The type-species, *Simia sphinx* Linnaeus, 1758, was not fixed in the original publication, and its subsequent designation dates from G.M. Allen (1939: 157). Apart from *Papio* Müller, 1773, it is antedated only by vernacular names, and by a misspelling: *Paphio* Gray (1821: 298).

11. This was the situation to which Hopwood drew attention in 1947, but since that time few authors have adopted the generic names he suggested. Ellermann, Morrison-Scott & Hayman (1953: 101), Fiedler (1956: 185), Kuhn (1967: 32), Jolly & Brett (1973: 85-99) and Delson (1975: 170, 213) have ranked *Chaeropithecus* as a subgenus of *Papio* Müller whereas only Booth (1958: 589, 606) has employed *Chaeropithecus* as a full genus. Several authors have avoided the issue by considering the mandrill and baboon as congeneric, without infrageneric subdivision within *Papio* Müller, e.g. Thorington & Groves (1970: 634) and Buettner-Janusch (1966: 288), the latter including *Theropithecus* as well. On the other hand, many others have chosen knowingly to disregard the Code, using *Papio* Erxleben for the baboon and *Mandrillus* Ritgen for the drill and mandrill, e.g. Freedman (1957: 180); Grubb (1973: 161); Hill (1967, 1968, 1970); Jolly (1966, 1967, 1970, 1972); Maier (1970); Napier & Napier (1967); and Piveteau (1957). Furthermore, a committee formed by the late Dr. W.C. Osman Hill immediately following the First International Symposium on the Baboon in 1963 unanimously concluded that the customary usage of *Papio* Erxleben, 1777 for the savannah baboons and *Mandrillus* Ritgen, 1824 for the drill and mandrill should be adopted in order to avoid unnecessary nomenclatural confusion, pending a decision on the matter by the International Commission on Zoological Nomenclature (Hill, 1967). Unfortunately no request was made to the Commission at that time, and the situation is still unresolved. It should, however, be pointed out that at least one member of the Committee has since changed his mind (Jolly & Brett, 1973). Yet another usage is that of Walker et al (1964: 454-456) who employ *Chaeropithecus* for the baboon and *Mandrillus* for the drill and mandrill, *Papio* not being recognised at all. This terminology may have been the result of confusion rather than an intentional rejection of *Papio*. The latter is a possible step but one that we would strongly oppose.

12. To review, the major goals of interested taxonomists appear to be: (1) to retain the specific name *Simia sphinx* Linnaeus, 1758 for the mandrills; (2) to retain the generic name *Papio* auctorum for at least some of the baboons; and (3) to clarify the formal nomenclature of the group as a whole. There are two alternatives:-

(A) *Papio* Müller, 1773 for mandrills and drills, with type-species *Simia*

sphinx Linnaeus, 1758, and *Chaeropithecus* Gervais, 1839 for savannah baboons, with type-species *Simia cynocephalus* Linnaeus, 1766; or (B) *Mandrillus* Ritgen, 1824 for mandrills and drills, with type-species *Simia sphinx* Linnaeus, 1758, and *Papio* Erxleben, 1777 for the savannah baboons. In either case (A or B) it would be necessary to establish the identity of *Simia sphinx* as a mandrill by the designation of a neotype (see para. 3 and Appendix). With regard to the type-species of *Papio* Erxleben, Forbes designated *Papio sphinx* Geoffroy which is also based *inter alia* on *Simia sphinx* Linnaeus, the drill/mandrill. Thus in order to preserve *Papio* for the savannah baboons, it will be necessary for the Commission to use its plenary powers to designate *Cynocephalus papio* Desmarest, 1820 (the Guinea baboon) as the type-species. The choice between the two potential uses of *Papio* auctorum is, of course, the primary concern of this application, and the arguments for each view as well as the implications of both will now be considered.

13. Under alternative A, *Papio* Müller is retained for the mandrills while *Chaeropithecus* Gervais, the next available name, is used for the savannah baboons. This alternative upholds priority at the expense of the loss of what may be the more widely accepted current usage. In order to give effect to this alternative, it will only be necessary to invoke the plenary powers of the Commission to suppress *Papio* Brisson, 1762 (required in both alternatives A and B) and to rule on the type-species of *Papio* Müller, 1773. It is requested that *Simia sphinx* Linnaeus, 1758, as defined by reference to the neotype (see Appendix) be designated as the type-species of *Papio* Müller. No other use of the plenary powers would be required to establish the correct nomenclature for the taxa involved, and the rule of priority would not be contravened. Alternative A is supported by one of us (E.D.) in the belief that priority should be upheld in all but the most extreme cases, and that this does not qualify as such.

14. Alternative B is supported by the other author (P.H.N.) on the grounds that it is the declared purpose of the Code to promote stability of nomenclature. In order to retain the widely used terminology of *Papio* for the savannah baboons and *Mandrillus* for mandrills and drills, it will be necessary to invoke the plenary powers of the Commission to suppress not only *Papio* Brisson, 1762 (as in alternative A) but also *Papio* Müller, 1773, thus giving *Papio* Erxleben, 1777 and *Mandrillus* Ritgen, 1824 priority for the two groups. The plenary powers will also be needed to designate *Cynocephalus papio* Desmarest, 1820, as type-species of *Papio* Erxleben, 1777. *Papio* Erxleben, 1777 and *Mandrillus* Ritgen, 1824 were used by Simpson in his classification of mammals (1945) which has been widely followed. They have been used in publications devoted to medical and veterinary research (e.g., Fiennes, 1967, 1972); the care of zoo animals (e.g. Crandall, 1964; *International Zoo Yearbooks,* 1962-1975), and in the United Nations Food and Agriculture Organization's *Code List of Vertebrate*

Animals (1970) and its associated data retrieval system. This inter-disciplinary usage increases the need for stability which is of fundamental importance in scientific communication.

15. The International Commission is therefore requested to:
    (1) use its plenary powers to suppress the generic name *Papio* Brisson, 1762 for the purposes of both the Law of Priority and the Law of Homonymy; and to
    (2) place this name on the Official Index of Rejected and Invalid Generic Names in Zoology; and to
    (3) choose between the following two alternatives:

Alternative A: to uphold priority and thus:
    (a) to use its plenary powers to set aside all designations of type-species prior to the ruling here requested for the nominal genus *Papio* Müller, 1773, and having done so to designate *Simia sphinx* Linnaeus, 1758, as defined by reference to the neotype designated by Delson & Napier, 1976 (see Appendix), to be the type-species of that genus; and
    (b) to place the following generic names on the Official List of Generic Names in Zoology:
        (i) *Papio* Müller, 1773 (gender: masculine), type-species under the plenary powers in A (a) above, *Simia sphinx* Linnaeus, 1758, and:
        (ii) *Chaeropithecus* Gervais, 1839 (gender: masculine), type-species by subsequent designation (J.A. Allen, 1925: 307) *Simia cynocephalus* Linnaeus, 1766, and:
    (c) to place the following specific names on the Official List of Specific Names in Zoology:
        (i) *sphinx* Linnaeus, 1758, as published in the binomen *Simia sphinx* (the specific name of the type-species of *Papio* Müller, 1773) as defined by reference to the neotype designated by Delson & Napier, 1976 (see Appendix), and:
        (ii) *cynocephalus* Linnaeus, 1766, as published in the binomen *Simia cynocephalus* (the specific name of the type-species of *Chaeropithecus* Gervais, 1839); or

Alternative B: to uphold widespread current usage and thus:
    (a) to use its plenary powers:
        (i) to suppress the generic name *Papio* Müller, 1773, for the purposes of both the Law of Priority and the Law of Homonymy; and
        (ii) to set aside all designations of type-species prior to the Ruling here requested for the nominal genus *Papio* Erxleben, 1777, and having done so to designate *Cynocephalus papio* Desmarest, 1820 as the type-species of that genus; and
    (b) to place the following generic names on the Official List of Generic Names in Zoology:
        (i) *Papio* Erxleben, 1777 (gender: masculine), type-species by

designation under the plenary powers in B (a) (ii) above, *Cynocephalus papio* Desmarest, 1820 and

(ii) *Mandrillus* Ritgen, 1824 (gender: masculine), type-species by subsequent designation (G.M. Allen, 1939: 157) *Simia sphinx* Linnaeus, 1758; and

(c) to place the following specific names on the Official List of Specific Names in Zoology:

(i) *papio* Desmarest, 1820, as published in the binomen *Cynocephalus papio* (the specific name of the type-species of *Papio* Erxleben, 1777), and

(ii) *sphinx* Linnaeus, 1758, as published in the binomen *Simia sphinx* (the specific name of the type-species of *Mandrillus* Ritgen, 1824) as defined by reference to the neotype designated by Delson & Napier, 1976 (see Appendix); and

(d) to place the generic name *Papio* Müller, 1773, as suppressed under the plenary powers in B (a) (i) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

APPENDIX

Simia sphinx Linnaeus, 1758. *Designation of a neotype*

Whether *Simia sphinx* Linnaeus, 1758 is to be the type-species of either *Papio* Müller, 1773 or *Mandrillus* Ritgen, 1824, it is necessary to fix its identity as a mandrill (see para. 3), and we therefore designate the following specimen as a neotype: *Maimon burlacei* Rothschild, 1922, British Museum (Natural History) Registered number: 1922.12.19. 7.

Selection of neotype:

In selecting a neotype, it was necessary first of all to investigate the basis, if any, of the recognised subspecies. Some authors, notably Dobroruka (1966: 155-8) and Hill (1970: 509-518) have recognized three :- *M. s. sphinx,* the nominate subspecies, supposedly from north of the River Sanaga in Cameroon; *M. s. madarogaster* Zimmermann (1780: 176) from south of the R. Sanaga, and *M. s. insularis* Zukowsky (1926: 132-6) from Fernando Po. After a careful study of the literature, including the early descriptions of Bartholinus (1671), Tyson (1706), Bradley (1721), Pennant (1771, 1781), Kerr (1792), Schreber (1774-1811) and Cuvier (1818, 1819) and the later revisions of Matschie (1917) and Matschie & Zukowsky (1917), it appears that no subspecies of mandrill has ever been described from north of the River Sanaga. Only one museum specimen of a mandrill (a skull without skin from Bafia (American Museum of Natural History No. 170364) has so far been traced from north of the R. Sanaga (Grubb, 1973: 167). Thus there is no basis in the literature for a northern subspecies. The numerous species and subspecies recognized and described by Matschie & Zukowsky in 1917 and Rothschild in 1922 (*sphinx, suilla, schreberi, hagenbecki, madarogaster, planirostris, tessmanni, escherichi, zenkeri* and *burlacei*] cannot at present be regarded as more than individual variations. Without a proper revision of the taxon, these names are best synonymized with the earliest, *M. sphinx.*

Likewise the sole representative of *Mandrillus insularis* Zukowsky was a subadult male sent from Fernando Po to Hagenbeck's Zoo in Stellingen (1926: 132, pl. on p.134). The fate of the specimen is not known; it may have been deposited in the Hamburg Museum and destroyed during the Second World War (Dobroruka, 1966). There is no other record of a mandrill from Fernando Po, nor was it listed by Krumbiegel (1942) in his list of mammals from the island. Recently Eisentraut (1973: 69) has gone further, removing it from his list of Fernando Po mammals for the present. The name *M. insularis* is therefore synonymized with *M. sphinx.*

Description of neotype.

The specimen described here is in the collections of the Department of Zoology, British Museum (Natural History), London, registered number 1922.12.19. 7, a mounted skin and separate skull collected at Bitye, River Ja (= Dja), S.E. Cameroon (c. 3° 01' N 12°22' E), and presented by the Rowland Ward Trustees.

Labels: Skin: (1) Wooden label: Burlace's Mandrill, *Maimon burlacei* (Male).

Bitye, Ja River, Cameroons. Presented by the Rowland Ward Trustees, 1922. 22.12.19.7. (2) Red 'type' label: *Mandrillus burlacei* W. Rothschild, 1922, *Ann. Mag. nat. Hist.* (9) vol.10:232, Aug. 1922. We have added a third label: *Simia sphinx* Linnaeus, 1758 NEOTYPE designated by Delson & Napier, 1976.

Skull: (1) Type of *Maimon burlacei* Rothschild. Sex: Male. *BM No:* 22.12.19.7 *Mandrillus sphinx* Linnaeus. *Loc:* Bitye, River Ja, S.E. Cameroon. *Coll:* Rowland Ward Trustees (P). (2) Red 'type' label: *Maimon burlacei* Rothschild, 1922, *Ann. Mag. nat. Hist.* (9) vol.10: 232. (3) Cardboard label with N.515 in pencil. We have added a fourth label: *Simia sphinx* Linnaeus, 1758 NEOTYPE designated by Delson & Napier, 1976. *Status:* Holotype of *Maimon burlacei* Rothschild, 1922 (*Ann. Mag. nat. Hist.* (9) vol.10: 232).

Description: Mounted skin of a male mandrill in quadrupedal stance, adult but not yet fully mature. The skull has all teeth erupted and in occlusion, but with very little wear on molars, and canines not yet fully grown. The coat is very dark brown, almost black, and lacks the yellowish tinge typical of the mandrill. The beard is yellowish-brown and rather sparse, and the long hairs of the pectoral tuft are buff and not yet fully developed. The skin of the neotype, measured over the curves from nose to tail, has a total length of 890 mm; head and body 810 mm, [tail 80 mm]. The skull measurments are as follows: length (prosthion / opisthocranion): 209.2 mm; zygomatic breadth: 118.2 mm; muzzle length (prosthion / nasion): 120.7 mm. The lower right P3 has three roots, an obvious anomaly, of interest for identification purposes.

Although *Maimon burlacei* was described by Rothschild as being "somewhat intermediate between the drill and mandrill" there is no justification for this statement as it is clearly differentiated from the drill by the longitudinally furrowed muzzle. This character is present in females and even in the newborn, as shown in the following key:

	Mandrill (*Simia sphinx* Linnaeus, 1758)	Drill (*Simia leucophaea* F. Cuvier, 1807)
Adult Males	Middle of face, nose and lips bright scarlet; maxillary ridges broad, light cobalt blue, longitudinally furrowed; prominent orange or yellowish beard and ruff	Whole face shiny black, lower lip scarlet; maxillary ridges narrow, unfurrowed; short whitish beard, black face surrounded by ring of whitish hairs
	Skull (of adult male): Broad maxillary ridges; distance between temporal crests at level of bregma is less than that between maxillary ridges at rhinion	*Skull* (of adult male): Narrow maxillary ridges; distance between temporal crests at level of bregma is greater than that between maxillary ridges at rhinon

Adult Females	Whole face dusky with reddish tinge on nose; sides of muzzle light blue, longitudinally furrowed	Whole face black, sides of muzzle unfurrowed
Young (at birth)	Muzzle flesh-pink, already furrowed	Muzzle flesh-pink, unfurrowed
Adult coat	General colour of coat dark brown with a distinct yellowish tinge; hairs have numerous bands of black and reddish-yellow (as many as 7 yellow bands on each hair)	General colour of coat dark brown with a greyish tinge; hairs are brown, generally with only a single light band and black tip
	RANGE: Cameroon, Rio Muni, Gabon and Congo (Brazzaville) from R. Sanaga to R. Kouilou [3° 12' S 13° 20' E]	*RANGE:* Nigeria and Cameroon, from R. Cross to R. Sanaga; Fernando Po.

Linnaeus cited "Borneo" as the habitat of *Simia sphinx* but this was clearly an error. The specimen on which the taxon was based, Gesner's *Papio,* was exhibited in Augsburg in 1551, and must be presumed lost.

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BEYRICHIA M'COY, 1846 (CRUSTACEA: OSTRACODA): REQUEST FOR THE DESIGNATION OF A TYPE-SPECIES AND NEOTYPE DESIGNATION FOR THAT SPECIES UNDER THE PLENARY POWERS. Z.N.(S.)1117

By David J. Siveter and P.C. Sylvester-Bradley (*Department of Geology, University of Leicester, Leicester, England*).

A request similar to the present case was originally submitted (1960: 227-230) to the Commission by Professor P.C. Sylvester-Bradley and Dr. Stuart Levinson. The purpose of their application was to add the generic name *Beyrichia* M'Coy, 1846 to the appropriate Official List along with that of the species accepted by most workers as type, *Beyrichia kloedeni* M'Coy, 1846. It was hoped thereby to remove the ambiguity that exists with regard to the identity of the type-species. The proposals of Sylvester-Bradley and Levinson (op. cit.) were never implemented; these authors did not invoke the use of the Commission's plenary powers, but, as reinterpreted herein, should have done so.

2. The genus *Beyrichia* was established by M'Coy (1846: 57) for a single species which he styled *"Beyrichia Klödeni* M'Coy" (material from Eire). At the time he introduced this specific name, M'Coy clearly regarded it as synonymous with the previously named *Battus tuberculatus* Klöden, 1834 (material from the Baltic) for he specifically named Klöden's name as a synonym, and stated (op. cit. : 58), "The species I propose naming after its original discoverer". M'Coy in a later paper of 1851 (p.135) revised his opinion and recognised (in the synonymy of "*Beyrichia Klödeni* (M'Coy)": "not *B. tuberculatus* of Klöden") that the material from Ireland is referable to a species separate from *Battus tuberculatus.* Although confusing matters, the abandonment of the synonymy does not affect directly the status of *Beyrichia kloedeni.*

3. It is only possible to interpret M'Coy's original (1846) action in naming the species as one in which *kloedeni* was a replacement name for *tuberculatus* ("The species I propose naming after its original discoverer"). Hence, *Beyrichia kloedeni* is a junior objective synonym of *Battus tuberculatus* and must take the same type-specimen. Under the Code (Article 67 i), the type-species of *Beyrichia* would be *Battus tuberculatus.*

4. *Battus tuberculatus* is now considered to be a species of *Nodibeyrichia* Henningsmoen, 1954, which is at present regarded as a genus distinct from *Beyrichia,* although a member of the same sub-family. *Beyrichia kloedeni* has been regarded as the type-species of *Beyrichia* by most writers on the subject; for example, Ulrich & Bassler (1923: 311), Straw (1928: 197), Henningsmoen (1954: 21, 22), Martinsson (1960: 15, 16; 1962: 14, 268, 269) and Sylvester-Bradley & Levinson (op. cit.). Kesling & Wagner (1956: 39-42) were notable exceptions in not sharing this opinion; they maintained that *Beyrichia kloedeni* M'Coy is a junior objective synonym of *Battus tuberculatus* Klöden, 1834, that *B. tuberculatus* is the type-species of *Beyrichia* and that *B. kloedeni* is therefore an invalid name.

5. If, following the Code and Kesling and Wagner, the two species were to be regarded as synonymous, this would necessitate changing the name *Nodibeyrichia* to *Beyrichia,* changing the concept of *Beyrichia* from that accepted since 1954, and finding a new name for the genus now known as *Beyrichia.* The genus *Beyrichia* M'Coy, 1846 is type of the family BEYRICHIIDAE Matthew, 1886 (*Proc. Trans. R. Soc. Can.,* for 1885: 63). It is also the type-genus of the order PALAEOCOPA Henningsmoen, 1953 (the superfamily BEYRICHIACEA was designated type superfamily by Henningsmoen, op. cit.: 37).

6. In place of Klöden's lost originals Martinsson (1965: 123) selected a neotype for *Battus tuberculatus* Klöden and under the Code this specimen must be regarded as, ipso facto, the type-specimen of *Beyrichia kloedeni.* The tecnomorphic right valve internal mould (National Museum of Ireland, Dublin, coll., now numbered NMI. GI. 1974; figured Straw, op. cit., pl.1, fig.1) proposed as lectotype of *Beyrichia kloedeni* in Sylvester-Bradley and Levinson's previous application (op. cit., p.229, paragraph 14 (2)) is therefore not eligible to be the type of the species. In addition, it is very badly preserved and is thus not suitable to serve as the neotype which is required if *Beyrichia* is to continue to be used in its accustomed sense, that is, with *B. kloedeni* as type-species. We therefore propose to abandon this specimen as "type" in favour of better preserved material. It is now proposed that a tecnomorphic left valve external mould (British Museum (Natural History), London, coll. no. I0 5546; cast figured Pl. 1, figs. 1-3) from recently collected topotype material be designated as neotype of *Beyrichia kloedeni.* This species is to be further described elsewhere by one of us.

7. Attention should also be drawn to the paper by Spjeldnaes (1966: 407-409) in which he outlines the "publication" of the long forgotten "Ostrapod" species called *Battus Kloedeni* n. sp. by N.P. Angelin in 1838-9. This taxon is identified by Spjeldnaes with the beyrichiacean species *Craspedobolbina* (*Mitrobeyrichia*) *clavata* (Kolmodin, 1869). If Angelin's name had been used prior to 1960 in combination with *Beyrichia,* it would have been a senior secondary homonym of *B. kloedeni* M'Coy. As it seems never to have been so used, and as it would now be regarded as a member of a different genus, *Battus kloedeni* Angelin can be ignored with respect to the case presented here. This would especially seem so as there is considerable doubt about the validity of the method of publication of Angelin's paper which was a printed catalogue of fossils for sale entitled, *"N.P. Angelini Museum Palaeontologicum suecicum".*

8 Therefore in the interests of stability of nomenclature, the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to:

(a) set aside all previous designations of type-specimen for the nominal species *Beyrichia kloedeni* and to designate the specimen referred to in paragraph 6 above as neotype for that species;

(b) set aside all previous type-fixations for *Beyrichia* M'Coy, 1846, and to designate *Beyrichia kloedeni* M'Coy, 1846, as defined by the neotype designated under its plenary powers in (a) above, as type-species;

(2) to place the generic name *Beyrichia* M'Coy, 1846 (gender: feminine) type-species under the plenary powers in (1) above, *Beyrichia kloedeni* M'Coy, 1846, on the Official List of Generic Names in Zoology;

(3) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *kloedeni* M'Coy, 1846, as published in the binomen *Beyrichia kloedeni*, and as interpreted by the neotype designated under the plenary powers in (1) (a) above (specific name of type-species of *Beyrichia* M'Coy, 1846);

(b) *tuberculatus* Klöden, 1834, as published in the binomen *Battus tuberculatus;*

(4) to place the family name BEYRICHIIDAE Matthew, 1886 (type-genus *Beyrichia* M'Coy, 1846) on the Official List of Family-Group Names in Zoology;

(5) to place the generic name *Beyrichia* Boll, 1847 (a junior homonym of *Beyrichia* M'Coy, 1846) on the Official Index of Rejected and Invalid Generic Names in Zoology.

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Professor A. Martinsson kindly commented on the manuscript.

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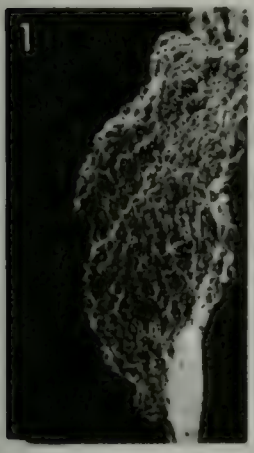
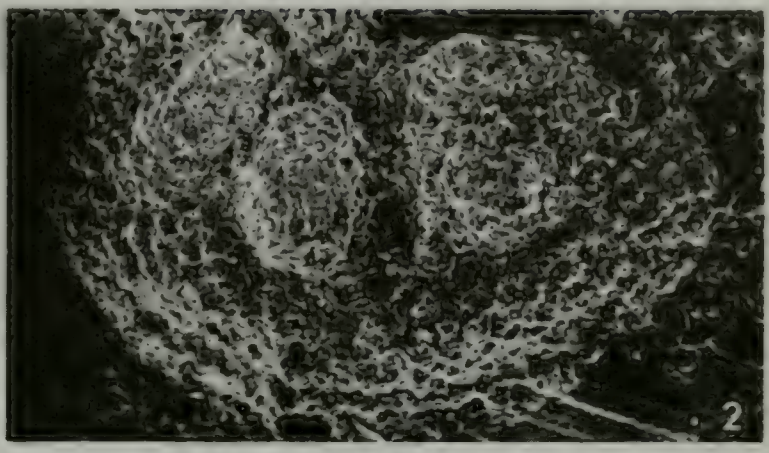
Explanation of Plate 1

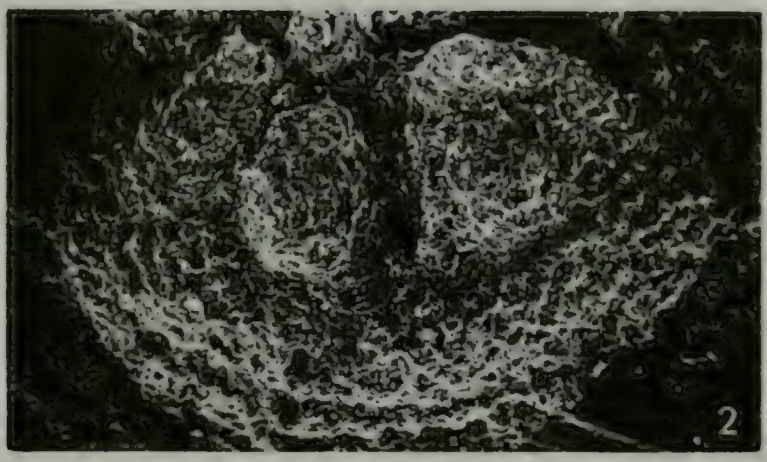
Beyrichia kloedeni M'Coy, 1846 proposed neotype: a tecnomorphic left valve, external mould, British Museum (Nat. Hist.) coll. no. IO 5546. Collected (D.J.S.) October 1970, from a loose block of sandstone, from the immediate vicinity of the (only remaining) cottage and nearby stream at Boocaun, about 2.5 km. WNW of Clonbur village, near Cong, County Galway, Ireland; National grid reference: M 068 564. Lower Owenduff Group, Annelid Grit (upper Llandovery, C_4-C_5 age; McKerrow & Campbell, 1960).

Figs. 1, 2. 'Silcoset' silicone rubber cast of external mould. Fig. 1, posterior view (stereo-pair), x 25. Fig. 2, lateral view (stereo-pair), x 25.

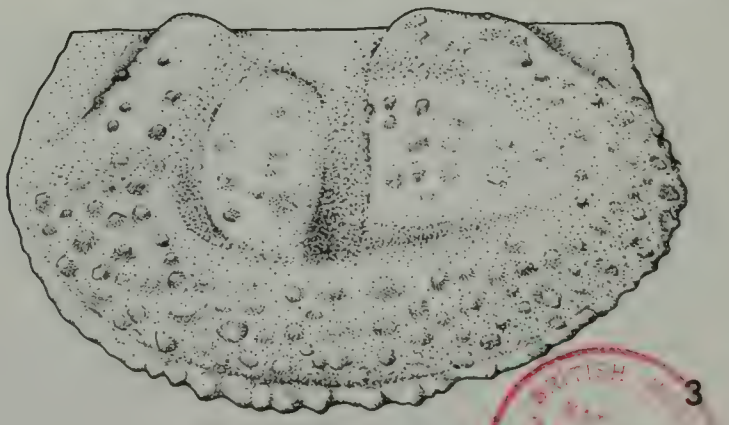
Fig. 3: Reconstruction of *B. kloedeni* based on proposed neotype, x 25.

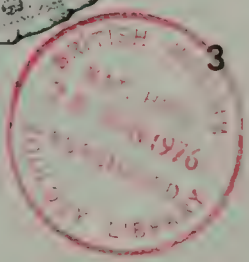






1000μ





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CONTENTS

(*continued from front wrapper*)

Prof. G. BERNARDI (*Muséum National d' Histoire Naturelle* 75005, *Paris, France*) (30 September 1972). **Lepidoptera**

Dr. C. DUPUIS (*Muséum National d' Histoire Naturelle* 75231, *Paris, France*) (30 September 1972). **Diptera**

Dr. M. MROCZKOWSKI (*Instytut Zoologiczny, Polska Akademia Nauk, Warsaw, Poland*) (14 March 1975). **Coleoptera**

Prof. H.E. WELCH (*Department of Zoology, University of Manitoba, Winnipeg, Manitoba, R3T 2N2 Canada*) (March, 1976) **Nematoda**

Opinions

Opinion 1055 (*Gryllus hieroglyphicus* Johannes Mueller (Physiologist), 1826) (Insecta: Orthoptera) 11

Opinion 1056 (*Eudyptes atratus* Finsch, 1875) (Aves) 16

Opinion 1057 (*Donax variabilis* Schumacher, 1817) (Mollusca: Bivalvia) (*Latona* Schumacher, 1817) 19

Opinion 1058 (*Papilio actaeon* Fabricius, 1775) (Lepidoptera) 22

Opinion 1059 (*Calamopora* Goldfuss, 1829) (Anthozoa, Tabulata) 24

Opinion 1060 (*Diomedea leptorhyncha* Coues, 1866) (Aves) 27

Opinion 1061 (*Homoceras* Hyatt, 1884) (Cephalopoda) 29

Opinion 1062 (*Anobium* Fabricius, 1775; *Grynobius* Thomson, 1859; *Prioblum* Motschulsky, 1845) (Coleoptera) 31

Opinion 1063 (*Lechriodus* Boulenger, 1882) (Amphibia Salientia) 34

Opinion 1064 (*Ptenura* Templeton, 1844: *crystallina, Podura,* Müller, 1776) (Collembola) 36

New and Revived Cases

Page

Tipula oleracea species-group (Diptera: TIPULIDAE); revived proposals for stabilizing names (A.M. Hutson, R.I. Vane-Wright and P.S. Cranston) 39

Baboon and Mandrill (Mammalia: primates, CERCOPITHECIDAE): request for the determination of generic names. (E. Delson and P.H. Napier) 46

Beyrichia M'Coy, 1846 (Crustacea: Ostracoda): request for designation of type-species and neotype designation for that species under the plenary powers (D.J. Siveter and P.C. Sylvester-Bradley) 61

Comments

Comments on the proposal to validate *Aglaja* Renier, 1807 and AGLAJIDAE Pilsbury, 1895 (Mollusca) (W.O. Cernohorsky) 3

Comment on the proposed ruling on the Authorship of *Conus moluccensis* (Mollusca: Gastropoda) (A.J. John) 4

Reply to comments on the proposal to conserve *Liparthrum* Wollaston, 1864 (Coleoptera: SCOLYTIDAE) S.L. Wood) 4

Comments on the proposed suppression of *Rhiniodon* Smith, 1828 (Pisces) (R.K. Brooke) 4

Comment on the proposal concerning *Polydrusus* Germar, 1817 and *Phyllobius* Germar, 1824 (Coleoptera) (E.C. Zimmermann) 6

Comment supporting application for Opinion and Declaration that species-group names with unlatinized Greek adjectival endings are indeclinable, and proposal to modify language of proposed Declaration. (E. Eisenmann) Reply by R.K. Brooke 6

Additional facts in the case of *Pharopteryx benoit* Rüppell, 1852 (Pisces) (E. Tortonese) 9

Comment on the proposals concerning *Notozus* Förster, 1853 (Hymenoptera: CHRYSIDIDAE) (L.B. Holthuis) ..... Replies by Dr. Huber and D.S. Peters 9

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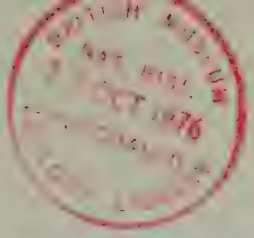

THE BULLETIN OF ZOOLOGICAL NOMENCLATURE

The Official Organ of

THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

CONTENTS

	Page
Notices prescribed by the International Congress of Zoology:	
Date of commencement by the International Commission on Zoological Nomenclature of voting on applications published in the *Bulletin of Zoological Nomenclature*	65
Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases	65
List of new applications	66

(*continued inside back wrapper*)

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(continued inside back wrapper)

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NOTICES

(a) *Date of Commencement of Voting.* — In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the Plenary Powers.* — The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin* [that marked with an asterisk involves the application of Articles 23a-b and 79b]:

(1) ELAPIDAE Boie, 1827 (Reptilia; Serpentes), suppression and validation of names related to. Z.N.(S.) 2128.
(2) COLOBIDAE Blyth, 1875 (Mammalia; Primates), proposal to give precedence to, over SEMNOPITHECIDAE Owen, 1843 and PRESBYTINA Gray, 1825. Z.N.(S.) 2094.
(3) *Pleurocera* Rafinesque, 1818 (Gastropoda), proposed designation of type-species for. Z.N.(S.)83.
(4) ERIOCOCCIDAE Cockerell, 1899, proposed conservation of, and *Eriococcus* Targioni-Tozzetti, 1868, proposed designation of type-species for (Insecta; Homoptera). Z.N.(S.)2140.
(5) *Tanystropheus* H. von Meyer, [1852], (Reptilia) proposed conservation of. Z.N.(S.)2084
(6) *Sminthopsis murina* var. *constricta* Spencer, 1896 (Marsupialia; DASYURIDAE), proposed suppression of. Z.N.(S.)2080.
*(7) *Genypterus* Philippi, 1857 (Pisces), proposed conservation of. Z.N.(S.)2126.

(c) The following new applications have been received since the publication of vol. 33(1) in June 1976. Those marked with an asterisk involve the application of Articles 23a-b and 79b.

*(1) *Siphonophora* Brandt, 1837 (Diplopoda), proposed conservation. Z.N.(S.)2168. (C.A.W. Jeekel)

(2) *Phrynus* Lamarck, 1801 (Amblypygi), proposed conservation. Z.N.(S.)2169. (D. Quintero)

(3) *Pieris napi microstriata* Comstock, 1925 (Lepidoptera), proposed conservation. Z.N.(S.)2170. (A.M. Shapiro)

(4) *Selkirkia* Walcott, 1911 (Priapulida), proposed designation of type-species. Z.N.(S.)2171. (S. Conway Morris)

*(5) *Hippothoa expansa* Dawson, 1859 (Polyzoa), proposed conservation. Z.N.(S.)2172. (Anna B. Hastings)

*(6) *Toxorhynchites brevipalpis* Theobald, 1901 (Diptera, CULICIDAE) (Official List of Specific Names No. 1615), proposed conservation. Z.N.(S.)2173. (G.B. White)

(7) *Chlorophis carinatus* Andersson, 1901 (Reptilia, Serpentes) to be given precedence over *Philothamnus nigrofasciatus* Buchholz & Peters, 1875. Z.N.(S.)2174. (B. Hughes)

(8) *Papilio lintingensis* Osbeck, 1765 (Lepidoptera), proposed suppression. Z.N.(S.)2175. (F. Hemming)

(9) *Papilio hylax* Fabricius, 1775 (Lepidoptera), proposed suppression. Z.N.(S.)2176. (F. Hemming & N.D. Riley)

(10) *Stromatoporella* Nicholson, 1886 (Stromatoporoidea), type-specimen of type-species. Z.N.(S.)2177. (J. St. Jean)

(11) *Nomioides* Schenck, 1866 (Hymenoptera), proposed designation of type-species. Z.N.(S.)2178. (Y.A. Pesenko and I.M. Kerzhner)

(12) *Acanthocinus* Megerle *in* Dejean, 1821 (Coleoptera), proposed designation of type-species. Z.N.(S.)2179. (R.C. Marinoni)

(13) *Ceroplesis* Serville, 1835 (Coleoptera), proposed designation of type-species. Z.N.(S.)2180. (R.C. Marinoni)

*(14) *Erythroculter* Berg, 1909, and *Culter ilishaeformis* Bleeker, 1871 (Pisces), proposed conservation. Z.N.(S.)2181. (P.M. Banarescu)

(15) The status of microform as publication. Z.N.(S.)2182. (Secretary)

(16) *Sebastocles* Jordan & Hubbs, 1925 (Pisces), proposed designation of type-species. Z.N.(S.)2183. (Lo-chai Chen)

*(17) *Sebastodes ruberrimus* Cramer, 1895 (Pisces), proposed conservation. Z.N.(S.)2184. (Lo-chai Chen)

*(18) *Neomenia* Tullberg, 1875 and *Solenopus dalyelli* Koren & Danielssen, 1877 (Mollusca, Solenogastres), proposed conservation. Z.N.(S.)2185. (D. Heppell)

*(19) PIERIDAE Duponchel, [1835] (Official List of Family-Group Names No. 206), proposed precedence over COLIADINAE Swainson, 1827 (Official List of Family-Group Names No. 227) (Lepidoptera). Z.N.(S.)2186. (C.F. Cowan)

(20) Family-group names in butterflies. Z.N.(S.)2187. (C.F. Cowan)
(21) *Annularia* Schumacher, 1817 (Gastropoda), type-species of; and associated family-group name problems. Z.N.(S.)2188. (F.G. Thompson)
(22) *Calymene variolaris* Brongniart, 1822 (Trilobita), proposed neotype designation. Z.N.(S.)2189. (R.P. Tripp, J.T. Temple and K.C. Gass)
(23) *Acidaspis coronatus* Salter, 1853 (Trilobita), proposed conservation. Z.N.(S.)2190. (A.T. Thomas)

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August 1976

R. V. MELVILLE
Secretary
International Commission on
Zoological Nomenclature

REPLY TO DR KROMBEIN'S COMMENT ON OUR PROPOSAL TO SUPPRESS *EUPLILIS* RISSO, 1826. Z.N.(S.)2056

By R.M. Bohart (*University of California, Davis, California 95616, U.S.A.*) and A.S. Menke (*Systematic Entomology Laboratory, U.S.D.A., c/o U.S. National Museum, Washington, D.C. 20560, U.S.A.*)

We accept the factual evidence produced by Dr Krombein for additional usage of *Euplilis;* however, we had assumed that the two supplements of his *Synoptic Catalog of the Hymenoptera of America north of Mexico* were implied in our petition when we cited the primary 1951 reference to the work. We did not give examples of usage of *Rhopalum* of the Muesebeck, 1963, and Bugbee, 1962, variety cited by Dr Krombein because we were concerned mainly with the important taxonomic literature, but certainly *Rhopalum* has been used many times in these kinds of papers. For example, a cursory examination of some recent literature reveals that Lomholdt (1973) gave biological data for *Rhopalum nigrinum* Kiesenwetter, that Gauss (1970) discussed some parasites of *Rhopalum clavipes* (L.), and that Danks (1971) provided considerable ethological data for the same species.

Clearly *Rhopalum* has been used more often in major works than *Euplilis*. In fact, the name has just been used by Lomholdt (1975, 1976) in an important book-length treatise in which the species of *Rhopalum* are keyed. Furthermore, Tsuneki (1974) has described two new species-group taxa in *Rhopalum*, and Marshakov (1975) used the name *Rhopalum* in his key to the genera of the Crabronini of the U.S.S.R. We adopted the name *Rhopalum* in our book "Sphecid Wasps of the World, a Generic Revision" which appeared in April, 1976. This work is a comprehensive systematic and biological treatment of the family, with synonymic checklists for all species and a synonymic generic catalog. Hence, it should compete well with Krombein's forthcoming catalog as the authoritative source for information on the SPHECIDAE. In fact, Dr Krombein has adopted for the most part our basic generic scheme in his new catalog. Dr Krombein's statement that *Euplilis* is already "in the computer" is not a strong argument in favour of retaining it, for one of the advantages of computerization of the Hymenoptera Catalog is the ease with which changes can, and in fact have been made, and new material incorporated.

We still maintain that the consensus of usage and opinion among sphecid workers is in favour of *Rhopalum*.

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TSUNEKI, K., 1974. Sphecidae from Korea. *Ann. Hist.-Nat. Mus. Natl. Hungarici* vol. 66: 359-387.

COMMENT ON APPLICATION FOR A RULING ON THE AVAILABILITY OF FIVE SPECIFIC NAMES PROPOSED AS NEW FOR THE GENUS *HETERODERA* A. SCHMIDT, 1871 (NEMATODA) IN "A PRELIMINARY KEY TO BRITISH SPECIES OF *HETERODERA* FOR USE IN SOIL EXAMINATION" BY B.A. COOPER, 1955. Z.N.(S.) 2066

(See vol. 31: 225-227; 32: 207-208)

By Russell M. Jeffords (*8002 Beverly Hill, Houston, Texas 77063, U.S.A.*)

From information provided in the application and subsequent comment (but without personal examination of Cooper, 1955, or familiarity with nematode systematics or literature), I record my support for rejection of all the original appeal.

2. The possibly conditional nature of the original proposal of the names in 1955 is not pertinent under the present Code.

3. The editorial (not author) opinion as to the lack of nomenclatural status for the names constitutes only one observer's evaluation that provides no clue as to whether that observer was applying Code provisions accurately, etc. As a sometime editor, I feel justified in pointing out that the use of quotes on Cooper's newly named species may well not reflect the author's opinion but rather represent an editorial insertion that accords with editorial interpretation recorded in the footnote.

4. It was and is not uncommon for an author to include previously unpublished names in a report intended for practical "application" along with meager descriptions and other data and to indicate his intent (only partly realized commonly) to supply the full details later. He seems, thereby, to indicate his recognition of the relative inadequate subjective status of the newly proposed taxa but does not necessarily provide any indication as to his evaluation of their objective nomenclatural status. Availability under the Code for such names published after 1930, however, surely rests not on what the author indicated as his plan but on whether requirements for availability (notably the statement of characters purporting to differentiate the taxon - Article 13a) are satisfied. From the original application and subsequent comment, I interpret that the key and incidental text mention by Cooper do provide at least minimal citation of one or more characters – this being adequate to satisfy the "purported" statement. The critical factor for objective nomenclatural analysis here seems to be the citation of at least one character (definitely not required by Article 13a is a description meeting the highest standards of descriptive work in the group). The subjective evaluation of the adequacy of this citation is entirely a different matter wherein the degree of compliance with conventional practices in the group may be critical. A clear and firm distinction between requirements (1) for objective nomenclatural availability and (2) for subjective zoological recognition and characterization needs to be maintained in nomenclatural discussions. Thus, the five species newly proposed by Cooper are deemed available from a nomenclatural standpoint, but all or several may also be judged now as having little subjective zoological significance. If an author does not cite any characters, non-compliance with Article 13a (i) is obvious — if he merely cites one character or a few characters (regardless of their subjective value), who now can demonstrate that this is not what "purported" to differentiate the taxon?

5. The concept of non-applicability of the Code to (and consequently lack of availability for) ". . . names proposed for other than taxonomic use, . . ." (Art. 1; Sabrosky, 1972) has been raised in the original appeal but seemingly resolved adequately in the present case by the comment of Wouts and Andersson. The extent to which this particular Code provision is to be applied in specific examples, however, seems a matter of some considerable general importance; i.e., names otherwise qualified for availability may be rejected because of this over-ruling requirement. Thus, it should be applied only where an author clearly and explicitly states or demonstrates within a publication that the names are not intended for taxonomic use, are not to be accepted as a part of formal zoological nomenclature under the Code, etc. It seems very wrong to exclude from availability (except under plenary powers) otherwise adequately proposed names on the basis of a tenuous assumption that the author proposed them for other than taxonomic use. An author's explicit statement that his use of names is not

for taxonomic purposes seems interpreted commonly as eliminating any chance for availability even though the names otherwise may satisfy Code requirements. If this interpretation is inaccurate, prompt clarification by the Commission is essential.

6. The original appeal includes the request to *declare* (without resorting to plenary powers) that the five names (i.e., *bifenestra, limonii, methwoldensis, polygoni,* and *urticae*) of Cooper (1955) are not available. Inasmuch as (1) no overwhelming need for such action has been demonstrated to warrant plenary action and (2) the names seem readily interpreted under the Code as nomenclaturally available, rejection of this request is suggested.

7. If the five names of Cooper are accepted as available (as suggested herein), then the reasons for the appeal for plenary action to suppress the name *urticae* of Pogosyan are destroyed. It seems rather a straight forward (albeit tedious) task to recognize the taxa proposed by Cooper using lectotypes or neotypes (evidently as done by Matthews, 1970), to make comparisons with other comparable taxa, to determine subjective synonyms, etc. This, then, would reveal the zoological relationships of taxa assigned to *urticae* by Pogosyan in 1962 and to *bifenestra* by Kiryanov and Krall in 1971. These subjective zoological aspects are a normal part of systematic study where interpretations are expressed in accordance with Code nomenclatural requirements.

8. References cited herein all are given in the original appeal by A.R. Stone or in the subsequent comment.

COMMENT ON THE PROPOSED SUPPRESSION OF *RHINIODON* SMITH, 1828, IN FAVOUR OF *RHINCODON* SMITH, 1829. Z.N.(S.)2090

(See vol. 32: 163-167)

By Carl L. Hubbs (*Professor of Biology Emeritus, Scripps Institution of Oceanography, La Jolla, California* 92093, *U.S.A.; retired member of the Commission*), Leonard J.V. Compagno (*Department of Biological Sciences, Stanford University, Stanford, California* 94305, *U.S.A.*), and W.I. Follett (*Department of Ichthyology, California Academy of Sciences, San Francisco, California* 94118, *U.S.A.*)

We oppose the request of Drs Robins and Lea to suppress the valid name *Rhiniodon* Smith, 1828, in favour of the incorrect subsequent spelling *Rhincodon* Smith, 1829.

As noted by Penrith (*Copeia* 1972: 362, 1972), the correct original spelling of this generic name is *Rhiniodon* (Smith, *S. Afr. comml. Advtr* vol. 3 (145): 2, 1828). The original description of the genus and species, as reproduced by Penrith, contains the significant words "Teeth small, ... so disposed ... as to exhibit the resemblance of a *rasp or file*" [emphasis added].

Thus, contrary to the statement of Drs Robins and Les, there is in the original description clear evidence that the generic name *Rhiniodon* is derived from the Greek words *rhine* (rasp or file") + *odous* (odont) ("tooth").

Since the discovery by Penrith of the correct original spelling, *Rhiniodon*, that spelling has been used by Compagno (*J. Linn. Soc.* (*Zool.*) vol. 53, suppl. 1: 28, 51, 1973), Smith (*J.L.B. Smith Inst. Ichthyol.* spec. Publ. 14: 12, 1975), Schwartz & Burgess (*Sharks of North Carolina and adjacent waters*, 3, 10, 12, 14, 34, 54, 1975) and Bass, D'Aubrey & Kistnasamy (*Invest. Rep. oceanogr. Inst., Durban* vol. 39: 50, 1975).

The change to the misspelling *Rhincodon* first appeared in the publication which was formerly considered the original description of this genus, but which was in fact the second such description (Smith, *Zool. J.* vol. 4: 443, 1829). It omitted the resemblance of the teeth to a rasp or file.

Smith's 1829 change in the original spelling was not demonstrably intentional. Any change, not demonstrably intentional, in the original spelling of a name is an "incorrect subsequent spelling," which has no status in nomenclature (International Code of Zoological Nomenclature, Article 33b).

Dr E.W. Gudger, who was the foremost student of the whale shark, discussed the spelling *Rhincodon* as follows (*Zoologica, N.Y.* vol. 1: 385, 1915): "It is true that the printer in England mistook Smith's 'e' for a 'c', and Smith being at the Cape of Good Hope, this error was uncorrected. But since the derivation is *rhine*, file + *odous* (odont) tooth, it would be absurd to let the error stand, and hence the present writer has used what seems to him the correct terminology, *Rhineodon typus*.".

Among others who rejected the spelling *Rhincodon* as a misprint and who adopted the spelling *Rhineodon* were Jordan & Evermann (*Stanford Univ. Publ., Univ. Ser.:* 174, 1917), Jordan (*Stanford Univ. Publ., Univ. Ser.:* 244, 1919), Beebe & Tee-Van (*Zoologica, N.Y.* vol. 26: 97, 1941), Herre (*Res. Rep. U.S. Fish Wildl. Serv.* vol. 20: 14, 1953), Chyung (*Korean Fishes:* 8, 1954), and Norman (*Draft Synopsis of the Orders, Families and Genera of Recent Fishes and Fish-like Vertebrates:* 10, 1966).

Drs Robins and Lea could have presented stronger support for *Rhineodon* than for *Rhincodon*. During the past 50 years, the spelling *Rhineodon* appears to have had more extensive usage than *Rhincodon:* in a search (not exhaustive) of the literature of the past 50 years, we found 100 publications that used *Rhineodon*, but only 86 that used *Rhincodon*.

The spelling *Rhineodon*, which has been used as recently as 1970, has had a much longer period of continual use; *Rhincodon* had apparently been used only seven times before the publication of Bigelow & Schroeder (*Mem. Sears Fdn Mar. Res.* vol. 1: 59, 1948).

While both *Rhineodon* and *Rhincodon* are incorrect subsequent spellings, *Rhincodon* is also an erroneous spelling. The letter "c" in the spelling *Rhincodon* represents an inadvertent error, such as a lapsus calami or a copyist's or printer's error. In contrast, *Rhineodon* is a precise transliteration from the Greek of Smith's (1828) words "rasp or file" + "tooth".

Since usage has varied so extensively, during the past 50 years, between *Rhinodon*, *Rhincodon*, and *Rhineodon* — which are merely different spellings of the same name — it would not disturb stability or universality, nor cause confusion, to retain the correct original spelling, *Rhiniodon* Smith, 1828.

We therefore ask the Commission to:

(1) place on the Official List of Generic Names in Zoology the generic name *Rhiniodon* Smith, 1828 (gender, masculine), type-species, by inclusion of a new species named *typus, Rhiniodon typus* Smith, 1828;

(2) place on the Official List of Specific Names in Zoology the specific name *typus*, as published in the binomen *Rhiniodon typus* (specific name of the type-species of *Rhiniodon* Smith, 1828);

(3) place on the Official List of Family-Group Names in Zoology the family-group name RHINIODONTIDAE (correction, by the International Commision, of Rhinodontes Müller & Henle, 1839), type-genus, *Rhiniodon* Smith, 1828;

(4) place on the Official Index of Rejected and Invalid Generic Names in Zoology the generic name *Rhincodon* Smith, 1829, an incorrect subsequent spelling of *Rhiniodon* Smith, 1828;

(5) place on the Official Index of Rejected and Invalid Family-Group Names in Zoology the following family-group names:

(a) Rhinodontes Müller & Henle, 1839, the incorrect original spelling of RHINIODONTIDAE;

(b) RHINCODONTIDAE Garman, 1913, an incorrect subsequent spelling of RHINIODONTIDAE Smith, 1828.

COMMENT ON THE APPLICATION CONCERNING *NOTOZUS* FÖRSTER, 1853. Z.N.(S.) 2109 (see vol. 32: 181-187)

(1) By W.J. Pulawski (*Wroclaw University, Poland*)

The proposed suppression of the generic name *Elampus* Spinola, 1806 is based mainly on the fact that many writers have used it incorrectly for *Omalus* Panzer. The argument is not

sufficient in my opinion, and the strict application of the Code is the best solution of the case. In fact *Elampus* must supersede *Notozus* Förster under the Law of Priority (if the type-species of the latter is designated accordingly). This synonymy implies other (mainly restored) combinations of names for the species now placed in *Notozus;* it does not lead to any confusion between species.

Rejecting *Elampus*, on the other hand, would increase the number of exceptions to the Code. Such exceptions are very undesirable in my opinion, and their number should be kept as low as possible. I feel strongly that nomenclatural problems should be resolved by automatic rules. Otherwise we should have a set of individual cases, and the Code would lose most of its value.

(2) By R.M. Bohart (*University of California, Davis, California 95616 U.S.A.*)

I object to the replacement of *Elampus* Spinola, 1806 with *Notozus*, 1853, and on the whole it appears that Mr Huber's arguments are weak. He suggests that the status of the name *Elampus* is vague since the originally included species were not all congeneric in modern terms. Since this circumstance was common in the nineteenth century, it carries little weight. The fact is that Latreille's 1810 designation of *Chrysis panzeri* Fabricius 1804 as the type-species of *Elampus* adequately defined the genus in the sense it has been used consistently in North America since 1939. There is no basis for Huber's claim that "*Elampus* is essentially an unused or misused name .....".

COMMENT ON THE PROPOSED VALIDATION OF *HALECIUM* OKEN, 1815. Z.N.(S.)2116 (see vol. 32: 252-254)

By H. Lemche (*Universitetets Zoologiske Museum, Universitetsparken 15, Copenhagen, Denmark*)

The purpose of this application can be met simply by first validating (under the plenary powers) the generic name *Halecium* as from Oken, 1815, and by then designating *Sertularia halecina* as type of *Thoa* - which would then become a junior objective synonym of *Halecium* and need no further treatment. If that course were adopted, then the applicant's proposal (1) (b) could be deleted.

Reply by Dr Cornelius

It seems that Dr Lemche's ingenious formula is perfectly adequate. I therefore designate *Sertularia halecina* Linnaeus, 1758 (: 809) as type-species of *Thoa* Lamouroux, 1816 (: 210), but stipulate that this designation shall be consequent upon the Commission's accepting my proposal that *Halecium* be made available. The withdrawal of my original proposals for the suppression of *Thoa* is also consequent upon that action.

Incidentally, Dr Lemche's proposal also removes any possible threat by *Thoa* to *Eudendrium* Ehrenberg, 1834. Therefore my proposals (3), to place that name on the Official List, and (4) (b), to place *ramosa, Tubularia,* Linnaeus, 1758, on the Official List can also be withdrawn, together with proposal (5) (b), to place EUDENDRIIDAE on the Official List. My application is thus limited to the validation of *Halecium* under the plenary powers, with the consequences that flow directly from that concerning the specific name of the type-species and the family name.

REQUEST FOR SUPPRESSION AND VALIDATION OF NAMES RELATED TO THE ELAPIDAE (REPTILIA: SERPENTES). Z.N.(S.) 2128

By Hobart M. Smith and Rozella B. Smith (*Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, Colorado, U.S.A. 80309*)

The nomenclatural predicament that prompts the present appeal for intervention by the Commission is the threat to the stability of the family-name ELAPIDAE for the cobras, coral snakes and their many proteroglyph relatives. The name ELAPIDAE is so well entrenched especially in medical literature, with vital association with varied protocols for snake-bite treatment, that a change would be literally disastrous. As stated by McDowell (1968: 577), "The terms 'elapid' and 'elapine' are frequent in the medical literature and on the labels of bottles of antivenin, and it would very likely cost several human lives to change the family-name of the large American coral snakes, tiger snake, cobras, kraits and mambas. Since the medical men who will have to choose the proper antivenin quickly are unlikely to follow the intricacies of the nomenclatural Code, it would be irresponsible to treat the family-name of dangerous snakes with ..... frivolity ....". Physiological, ecological and taxonomic usages are likewise worldwide, deeply entrenched and invariable; no alternative names have been used since modern techniques of treatment have appeared. Under these circumstances, nomenclatural security for the name is mandatory and is the compelling basis for the present petition.

2. The nomenclatural uncertainties pertaining to the name ELAPIDAE involve the type-species of the type-genus, *Elaps* Schneider (1801: 289), as well as the affinities of that species. Amaral (1926: 1-6) was apparently the earliest to explain the transfer of the name *Elaps* for the American coral snakes to a South African genus previously known as *Homorelaps* (e.g. Boulenger, 1896: 408) or *Homoroselaps* Jan (1858: 518), of which Boulenger's name is an invalid emendation. The transfer actually was initiated by Stejneger and Barbour (1917: 106), when they adopted *Micrurus* for the American coral snakes in place of *Elaps* which had been consistently used for them previously. Amaral (*loc. cit.*) pointed out that the basis was recognition of the earliest type-species designation for *Elaps* as that of Fleming (1822: 295), who cited *Elaps lacteus* Schneider from among the eleven species-group names assigned by Schneider to *Elaps*. That Amaral authoritatively represented the thoughts of Stejneger and Barbour (as they resurrected *Micrurus* without explanation) can be accepted with confidence, since Amaral was at the time of his publication a student of Barbour at the Museum of Comparative Zoology at Harvard University.

3. Thus assigned, *Elaps* is the proper name for a South African genus of two species, *E. lacteus* and *E. dorsalis*, most of the literature on which is summarized in the beautiful monograph by Fitzsimmons (1962: 283-286). The implications of this taxonomic treatment are made clear in the scholarly study by McDowell (1968), in which he demonstrates that *Elaps lacteus* Schneider is not a member of the family assemblage, including the terrestrial proteroglyphs, with which it has been placed for 150 years and for which it has been regarded as the type-genus (ELAPIDAE Boie, 1827: 510), but belongs with the subfamily APARALLACTINAE (Bourgeois, 1968) of the family COLUBRIDAE (Oppel, 1811: 217). The nomenclatural results of this rearrangement would be: (1) replacement of *Homoroselaps* Jan, 1858, by *Elaps* Schneider, 1801; (2) replacement of the subfamily name APARALLACTINAE Bourgeois, 1968, by ELAPINAE Boie, 1827; and (3) replacement of the family name ELAPIDAE by the next earliest name applied to any genus of the family. Obviously these sequelae run grossly counter to one of the three fundamental precepts of the International Code of Zoological Nomenclature, namely (1964: 3) "to promote stability", which would be gravely violated by acceptance of the indicated changes.

4. It should be noted that Kochva and Wollberg (1970) have refuted McDowell's proposition that *Elaps* is a colubrid and not an elapid, although they made it plain that their objection was based upon concern for nomenclatural stability as much as upon their evidence, since it was admittedly inconclusive. They insisted that name changes should come only where evidence from every source incontrovertibly necessitates them. McDowell (personal communication) remains firmly convinced and has an exhaustive and conclusive defense for his original position near completion. Regardless of the outcome of this controversy, it is imperative that the nomenclatural security at least of the family name ELAPIDAE be guaranteed. Even the most incontrovertible evidence that *Elaps* must be assigned to a different family cannot be permitted to jeopardize at least the established family-group nomenclature.

5. Thus far we have stated the case under the assumption that the type-species of *Elaps* is indeed *lacteus*, following Amaral's explicit statement. In fact, however, Fleming (1822: 295) did not designate the type according to the Code (1964: 69) now in effect, nor did his treatment suffice for type-designation by any earlier version of the Code. Art. 69a (iii) specifies that "In the absence of a prior valid type-designation for a nominal genus, an author is considered to have designated one of the originally included nominal species as type-species, if he states that it is the type (or type-species), for whatever reason, right or wrong, and if it is clear that he himself accepts it as the type-species". Although Fleming was aware of the type-concept, stating explicitly what species are types for the genera *Salamandra* (p. 297), *Rana* (p. 304), *Bufo* and *Pipa* (p.305), for no other genera did he indicate that the cited species, if any, was anything but an example. For several genera (e.g. *Cistuda, Chameleon, Dracaena, Draco, Lophurus et al.*) no species are cited at all and for a few (e.g. *Monitor,*

Acanthophis) two are cited, although for most a single species is listed. For *Elaps,* only *E. lacteus* is given. At no place in the book is there any indication that the species cited are regarded as types, except for the four genera first mentioned here, for which the indication is individually explicit. The user of Fleming's work can only conclude that for other nominal genera the cited species is merely an example — except of course for new nominal genera, of which the cited species becomes the type. In brief, Fleming did not in fact fix the type-species of *Elaps*.

6. This conclusion is completely consistent with the conclusions of Opinons 68 and 69, which held that Fleming did not designate types for two genera of fishes (*Pleuronectes, Sparus*) treated much like *Elaps.* The discussion in these opinions makes it clear that *Elaps* would not have been regarded at that time as having had its type designated by Fleming. It is noteworthy that Stejneger, one of the Commissioners, disagreed with the conclusion of both opinions, and seemingly did not hesitate to adopt a conclusion in connection with *Elaps* that was clearly inconsistent with the spirit of the Code as then constituted.

7. Indeed, Brown (1908: 124) pointed out that Fleming did not comply with the rules for subsequent type-fixation, and he cited Gray (1825: 206) as the earliest to do so. Again, however, Gray gives no indication whatever that the cited species for any given genus constitutes its type; indeed, several species are cited for several nominal genera. Gray did cite but a single species for *Elaps,* namely "*E. lenniscatus,* Schneid." (= *Elaps lemniscatus* Schneider = *Coluber lemniscatus* Linnaeus), but it can be construed as no more than an example of the genus, not as a type-designation.

8. Fitzinger (1843:28) is the earliest worker explicitly to cite the type of *Elaps;* he designated "*Elaps corallinus* Neuw". Unfortunately that name was not cited by Schneider, was not then (1801) in existence, and embraced no Schneiderian name as a synonym either when proposed by Merrem (1820: 144) or when used by Wied-Neuwied (1824 (6): pl. 4 text). His type-designation is therefore invalid.

9. Curiously enough, the earliest valid type-designation for *Elaps* appears to be that of Brown (1908: 124); to be sure, he cited Gray as the designator, in error, but Art. 69 states that reason for citation of a type is immaterial, whether right or wrong. The 58 years of stability of *Micrurus* for most of the American coral snakes would terminate, however, if that type-designation and its automatic sequelae were accepted, for *Elaps lemniscatus*, designated as type of *Elaps* by Brown, is the valid name for a species in *Micrurus* Wagler (1824: 48), antedated 23 years by *Elaps* Schneider, 1801. Much the same arguments for stability of the family-name ELAPIDAE apply equally to the generic name *Micrurus*. Steps should be taken to prevent a change of nomenclature.

10. The comedy of errors is not yet fully unfolded, however. If the nominal genus *Elaps* were to be transferred from the ELAPIDAE of current understanding to the COLUBRIDAE, the next oldest name for the ELAPIDAE *auctorum* would, as generally accepted, be HYDROPHIIDAE Boie (1827:

510) which actually was published concurrently with the name ELAPIDAE, although the latter has by common consent been given nomenclatural priority over the former, so that if the two groups are regarded as confamilial the sea snakes constitute a subfamily of the ELAPIDAE, rather than the elapines constituting a subfamily of the HYDROPHIIDAE. Familial shift of the name *Elaps,* however, would leave the family-group name based on the sea snake *Hydrophis* as the earliest applied to any proteroglyph snake, at least as understood at the present time. The terrestrial proteroglyphs would, therefore, whatever their family-group name, constitute a subfamily of the HYDROPHIIDAE, at least for those authors who view the terrestrial and marine proteroglyphs as confamilial.

11. Unfortunately Boie (1827: 510) did not comply with the Code in erection of the family name "Hydrophidae", as he spelled it, for he did not recognize the genus *Hydrophis* as valid, although he certainly knew of it since he cited as valid another of Latreille's names (*Platurus*) proposed in the same work. It is clear that he (correctly) regarded *Hydrophis* Latreille, 1801, as a synonym of *Hydrus* Schneider, 1799. Art. 11 e explicitly states that to be considered available, "A family-group name must, when first published, be based on the name then valid for a contained genus, and must be a noun in the nominative, plural." On these grounds, Boie's name HYDROPHIDAE does not exist nomenclaturally.

12. At this point it is necessary to clarify the status of *Hydrophis*, which is not what it has long been thought to be. Malcolm Smith (1926: 41) designated "*Hydrophis fasciatus* Schneider, 1799" as the type-species of *Hydrophis* in the following passage: "The name *Hydrophis* was proposed by Latreille in 1802 [sic] for the sea-snakes with small ventral shields, and as applied to that group it has been in general use ever since. The genus is restricted to two species, namely *H. laticauda* (p. 195) and *H. platurus* (p. 197). Although under the first name he confused three snakes, the *Hydrus fasciatus* of Schneider (= *Hydrophis fasciatus*), the 'tatta pam' of Russell (= *Hydrophis mamillaris*) and the *Anguis laticauda* of Linnaeus, only the first two need be considered, for the last cannot be recognized from the description and the specimen is lost. On the grounds that the genus was framed as a substitute for *Hydrus* Schneider, and without designated type, Dr Stejneger has refused to accept it and has employed *Disteira* instead (Herpet. Japan, 1907, p. 419). I cannot agree with his conclusion or with the interpretation he has given of Latreille's word substitute. Latreille did more than merely substitute, for regarding Schneider's grouping of the genus as an unnatural one, he divided it up and distributed the species among two genera, *Hydrophis* and *Enhydris,* the characters of which he clearly set forth. Such a definite reconstruction of the genus *Hydrus* can hardly be termed substitution, and *Hydrophis* as represented by the first two species named by Latreille should stand for the name of the genus, with *Hydrus fasciatus* as type." However, he overlooked the fact that Latreille, *in* Sonnini & Latreille, 1801: 193, had expressly proposed the name to replace *Hydrus* Schneider, 1799, which he took to be a homonym of *Hydra* Linnaeus, 1758

(both names being rendered as "hydre" in French). Now the type of *Hydrus*, as enunciated in Opinion 18, is *Coluber hydrus* Pallas, 1771, by absolute tautonymy (under Article 30d of the old Règles and Article 68d of the current Code). If the Code is strictly applied, therefore, the long-familiar generic name *Hydrophis* must disappear, and a different type-genus found for the HYDROPHIIDAE. This would be a regrettable disturbance of stability.

13. Malcolm Smith treated *Hydrophis laticauda* Latreille, 1801, as though it were a new name. In fact it is impossible to tell from internal evidence whether this is so, or whether Latreille was simply using *Anguis laticauda* Linnaeus, 1758. Since he cited *H. fasciatus* Schneider as a synonym, the latter is probably correct. Linnaeus's name has been consistently treated as a nomen dubium since Schneider's time (1799), and no disturbance would result from its formal suppression for the purposes of the Law of Priority but not for those of the Law of Homonymy. The effect of this would be to invalidate "*laticauda* Latreille, 1801", if ever that name were regarded as valid in its own right, and to validate *fasciatus* Schneider in the sense in which it has been used ever since Malcolm Smith (1926) studied the type-specimen in the Berlin Museum. Plenary powers must, however, be used if *Hydrophis* is to be stabilised with *fasciatus* as type-species, following Malcolm Smith's generally accepted, though invalid, designation.

14. Several versions of family-group names (e.g. Hydri Oppel, 1811; Hydres Cuvier, 1817; HYDRIDAE Gray, 1825 etc., *fide* Kuhn, 1967: 78) are logical derivatives from the generic name *Hydrus* Schneider, 1799, which included sea snakes as well as fresh-water snakes, but none are applicable to the proteroglyph family-groups, since the type of *Hydrus* Schneider, 1799, as shown in paragraph 12, is *Coluber hydrus* Pallas, 1771 (= *Coronella tessellata* Laurenti, 1768, now *Natrix tessellata tessellata*), a member of the family COLUBRIDAE. Neither Hydri Oppel, 1811, nor HYDRIDAE Gray, 1825, is available, however, since neither contained a genus *Hydrus* considered valid by the author at the time of proposal of the family-group name. It is perhaps fortunate that Oppel's Hydri is unavailable, else it would compete with the family name COLUBRIDAE, stemming from Oppel's 1811 (pp. 47, 69) "Colubrini", which does conform with the requirements of the Code and is eligible for change of the suffix to agree with the modern rules for endings.

15. The earliest proposed, acceptable family-group name based on any sea-snake is Hydrophes Fitzinger (1843: 28). Kuhn (1967: 78) notes that Fitzinger credited Hemprich with the name, but Hemprich (1829: 291) actually created only the name "Hydros", which does not comply with the requirement (Art. 11e) that the collective name be a noun in the nominative plural. (Hemprich created two other group names at the same time: Amphisbaenas and Achrochordias; although the latter actually is the earliest group-name for *Acrochordus*, all of Hemprich's collectives are in the accusative plural and therefore cannot be accepted as bases for modern family-group names). The family name HYDROPHIIDAE can, however, stem

from Fitzinger's Hydrophes, which is a noun in the nominative plural and includes *Hydrophis*, recognized by Fitzinger.

16. It has been accepted in the past that the family-group names ELAPIDAE and HYDROPHIIDAE, both of Boie, 1827, were the earliest of that rank applied to proteroglyph snakes. In fact, however, at least one other antedates both: the "Bungaroidea" Fitzinger (1826: 11, 32), explicitly proposed as a family name and based upon a generic name valid then as now, and therefore emendable in accordance with Art. 11e (ii) as the BUNGARIDAE, derived from the generic name *Bungarus* Daudin, 1803, applied to the kraits (members of the family ELAPIDAE *auctorum*). Obviously it would be undesirable to replace the family-name ELAPIDAE with any other name, whether through priority or generic reallocation.

17. The nomenclatural necessities of the present predicament are clear: to ask for exercise of the plenary powers of the Commission to validate the family name ELAPIDAE and the generic name *Micrurus* and place them on the appropriate Official Lists, by whatever nomenclatural manoeuvres seem appropriate, setting aside all conflicting nomenclatural events of the past. A review of the species originally assigned by Schneider to *Elaps* is a desirable first step in consideration of the proper manoeuvres.

18. Oddly, only two of Schneider's eleven species of *Elaps* belong to the ELAPIDAE *auctorum*, now that *lacteus* has been removed from consideration: *furcatus* Schneider (now *Maticora intestinalis* Laurenti, 1768, of the Malay Peninsula) and *Coluber lemniscatus* Linnaeus, 1758 (now *Micrurus lemniscatus* of South America). To prevent the family-group name ELAPIDAE from following *lacteus*, and to restore it to an earlier near-universal fixation, the Commission should designate the type of *Elaps* as *Coluber lemniscatus* Linnaeus, setting aside all other type-designations. This is the species that from the beginning was the logical candidate for type-designation, since it was the first that Schneider listed for *Elaps*, and one of only four of the eleven included by Schneider in *Elaps* that stemmed from Linnaeus; *duberria* was a Merrem, 1790, name, whereas all the other names were new as of Schneider. To prevent replacement of *Micrurus* Wagler, 1824, by *Elaps* Schneider, 1801, the Commission could rule that *Elaps* not be used in lieu of *Micrurus* by those who regard their type-species as congeneric. The genus now known as *Elaps* would take the next available name, to wit *Homoroselaps* (not the invalid emendation *Homorelaps*), by which it was regularly known until 1917 when Stejneger and Barbour almost surreptitiously reallocated *Elaps*. In recognition of past vagaries the genus should be given the protection of a conserved name, *Homoroselaps*.

19. These measures would preserve the family name ELAPIDAE and the generic name *Micrurus* in their present senses; would lay to rest forever (so long as *Elaps lemniscatus* is considered congeneric with *Micrurus spixii*) the peripatetically tainted and therefore useless generic name *Elaps*; would permit revival of *Elaps* without jeopardy to any other generic name or to the family name should its type-species ever be regarded as generically distinct from *Micrurus spixii;* and would protect the revived name

Homoroselaps, for the South African species *lacteus* and its relatives, from further change, leaving them free for proper allocation in accordance with their characters, unfettered by constraints of custom. If, as McDowell maintains, *Homoroselaps* is properly referred to the subfamily APARALLACTINAE, the subfamily name will not be affected by the history of association of one of its generic members with a still older family-group name.

20. In like fashion it would be well to protect the several other family-group names that have been involved in the ramifications of influence of the name ELAPIDAE and its various competitors, and to protect their nominal type-genera and type-species. In addition to *Elaps* and ELAPIDAE, previously discussed, the following names are involved: *Micrurus* and its type-species, *M. spixii; Homoroselaps* and its type-species, *H. lacteus;* HYDROPHIIDAE, its type-genus *Hydrophis*, and its type-species *H. fasciatus; Aparallactus* and its type-species, *A. capensis;* and COLUBRIDAE, its type-genus *Coluber*, and its type-species *C. constrictor.*

21. *Micrurus* Wagler, 1824, has consistently been applied to the American coral snakes (some 50 species as now understood, 110 species and subspecies), ever since the Stejneger and Barbour first edition of North American reptiles (1917); it has accumulated an enormous medical, ecological, biogeographic and taxonomic literature, and thereby strongly merits conservation. The plenary powers must be invoked to prevent its replacement by *Elaps* Schneider, 1801, if the recommendation here presented is adopted of designation of *Coluber lemniscatus* Linnaeus, 1758, as its type, since the latter species is congeneric, by universal agreement, with *Micrurus spixii* Wagler, 1824, monotype of *Micrurus.* Conservation of *Micrurus spixii* Wagler, 1824, still regarded as valid, is desirable if conservation of *Micrurus* is approved.

22. *Homoroselaps* Jan, 1858, is the oldest available name for the South African genus of two species to which the name *Elaps* has been assigned since 1917 (Stejneger and Barbour), when *Elaps lacteus* Schneider was construed to be the type of Schneider's polyspecific genus *Elaps*, which had no type-designation originally. However, such assignment of the type for *Elaps,* as explained previously, would shift the family name based upon *Elaps* (ELAPIDAE Boie, 1827) to the family now known as the COLUBRIDAE Oppel, 1811, requiring some new name for the family formerly known as the ELAPIDAE. Shift of the name *Elaps* to the genus *Micrurus* by designation as type of one of the other species included by Schneider in his *Elaps*, namely *Coluber lemniscatus* Linnaeus, as here proposed, requires use of the next available name for the African genus. In effect this returns to the pre-1917 nomenclature, for until then the American coral snakes were known as *Elaps* (taking *lemniscatus* as type), and the South African genus containing *lacteus* was known as *Homoroselaps* Jan, 1858, or, more frequently, as *Homorelaps* Boulenger, 1896 (an unjustified subsequent emendation). To fix the name of the unfortunate South African

genus from further vacillation, it is appropriate to request its conservation as *Homoroselaps*, along with its type-species (by monotypy), *Elaps hygeae* Merrem, 1820, as originally cited by Jan. Merrem's name is, however, a reallocation of *Coluber hygeiae* Shaw, 1802, which is a junior synonym of *Coluber lacteus* Linnaeus, 1758. The valid name for the type-species would therefore be *Homoroselaps lacteus* (Linnaeus, 1758).

23. The family-group name HYDROPHIIDAE for the sea snakes is at the present time more frequently applied at the subfamily level (HYDROPHIINAE) than at the family level, including it as a subdivision of the family ELAPIDAE. Since the usually-accepted source for the name (Boie, 1827) proves to be inacceptable, and the earliest acceptable proposal is Fitzinger's explicit family "Hydrophes" of 1843, it would be expedient to have Commission approval of this source, and to protect the family-group name for the sea snakes by placement on the Official List. The family-group name HYDROPHIIDAE or HYDROPHIINAE has been used universally for the sea snakes for over a century, and has a large medical, ecological, oceanographic and taxonomic literature, and thereby fully justifies conservation.

24. Protection of the family-group names ELAPIDAE Boie, 1827, and HYDROPHIINAE Fitzinger, 1843, requires suppression of the family-group name BUNGAROIDEA Fitzinger, 1826, proposed explicitly as a family, based upon the generic name *Bungarus*, which Fitzinger listed as one of the valid genera of the family, and formed properly as a noun in the nominative plural. This name would replace both the names ELAPIDAE and HYDROPHIINAE if not suppressed, for it antedates both and its type-genus is consubfamilial with *Elaps* (as here construed). As pointed out before, the literature using the name ELAPIDAE is so formidably extensive and the name is so entrenched in medical literature that a change for any reasons should be denied. Accordingly it is appropriate to request suppression of Fitzinger's name.

25. The subfamily to which the former *Elaps* (as of *E. lacteus*), now *Homoroselaps*, is assigned is the APARALLACTINAE Bourgeois, 1968, based upon *Aparallactus* Smith, 1849, having as monotype *A. capensis* Smith, 1849. The subfamily name would be replaced by the name ELAPINAE in the family COLUBRIDAE Oppel, 1811, if not prevented by exercise of the plenary powers of the Commission, as previously indicated (para. 19). To assure stability of this presently accepted name, it is appropriate to request conservation of the threatened name APARALLACTINAE, its type-genus, and the type-species of the latter.

26. The family-group name COLUBRIDAE Oppel, 1811, is one of the most widely-known of all reptilian names, and has been accepted universally for over a century. It is the largest family of snakes, including well over half the known snake species. Its literature is enormous, and for these reasons the name should not be changed under any circumstances. However, it is threatened by the family-group name "Hydri" of Oppel, 1811, proposed concurrently with his "Colubrini". "Hydri" presumably was

derived from *Hydrus* Schneider, 1799, although neither Oppel nor Gray, who next adopted a family name of the same source, creating a "Hydridae" (1825), recognized *Hydrus* as valid. These family-group names are therefore not available (occupied) as of either work, according to Art. 11(e) of the Code. The application of Oppel's or Gray's name, if either were to be regarded as available, through *Hydrus*, is not however self-evident, since Schneider included numerous species in his *Hydrus*, none designated as type. Several influential authors have regarded the name as applicable to the sea snakes, and therefore have used the name *Hydrus* in place of *Hydrophis*, and the name HYDRIDAE or HYDRINAE for the family-level group to which sea snakes belong (see Smith, 1926: 1 for a summary). However, Opinion 18 of the ICZN closes the matter by designation of a colubrid snake, *Coluber hydrus* Pallas, 1771, as type of *Hydrus;* Pallas' name is a junior synonym of *Coronella tessellata* Laurenti, 1769 (= *Natrix t. tessellata* of present nomenclature). Thus any family-group name derived from *Hydrus* falls with the family now known as the COLUBRIDAE Oppel, 1811, not with the HYDROPHIINAE. Although presumably neither the Oppel, 1811, nor Gray, 1825, family-group names is available, it is appropriate to conserve the name COLUBRIDAE in its present sense, since it is so deeply entrenched. Concomitantly its type-genus, *Coluber* Linnaeus, 1758, and its type-species *C. constrictor* Linnaeus, 1758, merit conservation. The earliest designation of the type of *Coluber* appears to have been that of Fitzinger (1843: 26). Suppression of Oppel's Hydri and Gray's Hydridae is not essential at the present time since the Code eliminates them from consideration.

27. We therefore ask the Commission:
    (1) to use its plenary powers
        (a) to set aside all designations of type-species hitherto made for the nominal genus *Elaps* Schneider, 1801, and to designate *Coluber lemniscatus* Linnaeus, 1758 as type-species;
        (b) to set aside all designations of type-species hitherto made for the nominal genus *Hydrophis* Latreille, 1801, and to designate *Hydrus fasciatus* Schneider, 1799, as the type-species;
        (c) to rule that the generic name *Elaps* Schneider, 1801, as defined under the plenary powers in (a) above, is not to be used to displace the generic name *Micrurus* Wagler, 1824, by any zoologist who considers both names to denote one genus;
        (d) to suppress the family-group name BUNGAROIDEA Fitzinger, 1826 (type-genus *Bungarus* Daudin, 1803) for the purposes of the Law of Priority, but not for those of the Law of Homonymy.
    (2) to place the following generic names on the Official List of Generic Names in Zoology:

(a) *Elaps* Schneider, 1801 (gender: masculine), type-species, by designation under the plenary powers in (1) (a) above, *Coluber lemniscatus* Linnaeus, 1758, with a direction that it is not to be used to displace *Micrurus* Wagler, 1824, by any zoologist who believes the two names to denote one genus;
(b) *Micrurus* Wagler, 1824 (gender: masculine), type-species, by monotypy, *Micrurus spixii* Wagler, 1824, with a direction that it is to be given precedence over *Elaps* Schneider, 1801, by any zoologist who believes the two names to denote one genus;
(c) *Homoroselaps* Jan, 1858 (gender: masculine), type-species, by monotypy, *Coluber hygeiae* Shaw, 1802;
(d) *Hydrophis* Latreille, 1801 (gender: masculine), type-species, by designation under the plenary powers in (1) (b) above, *Hydrus fasciatus* Schneider, 1799;
(e) *Aparallactus* A. Smith, 1849 (gender: masculine), type-species, by monotypy, *A. capensis* A. Smith, 1849;
(f) *Coluber* Linnaeus, 1758 (gender: masculine), type-species by subsequent designation by Fitzinger (1843: 26) *Coluber constrictor* Linnaeus, 1758.

(3) to place the following specific names on the Official List of Specific Names in Zoology:
(a) *lemniscatus* Linnaeus, 1758, as published in the binomen *Coluber lemniscatus* (specific name of type-species, by designation under the plenary powers in (1) (a) above of *Elaps* Schneider, 1801);
(b) *spixii* Wagler, 1824, as published in the binomen *Micrurus spixii* (specific name of type-species, by monotypy, of *Micrurus* Wagler, 1824);
(c) *lacteus* Linnaeus, 1758, as published in the binomen *Coluber lacteus*;
(d) *fasciatus* Schneider, 1799, as published in the binomen *Hydrus fasciatus* (specific name of type-species, by designation under the plenary powers in (1) (b) above, of *Hydrophis* Latreille, 1801);
(e) *capensis* A. Smith, 1849, as published in the binomen *Aparallactus capensis* (specific name of type-species of *Aparallactus*, A. Smith, 1849);
(f) *constrictor* Linnaeus, 1758, as published in the binomen *Coluber constrictor* (specific name of type-species of *Coluber* Linnaeus, 1758).

(4) to place the following family names on the Official List of Family-Group Names in Zoology:
(a) ELAPIDAE Boie, 1827, type-genus *Elaps* Schneider, 1801;
(b) HYDROPHIIDAE Fitzinger, 1843 (as "Hydrophes"), type-genus *Hydrophis* Latreille, 1802;

(c) COLUBRIDAE Oppel, 1811 (as Colubrini), type-genus *Coluber* Linnaeus, 1758;
(d) APARALLACTINAE Bourgeois, 1968, type-genus *Aparallactus* A. Smith, 1849.

(5) to place the family-group name BUNGAROIDEA Fitzinger, 1826, as suppressed under the plenary powers in (1) (d) above, on the Official Index of Rejected and Invalid Family-group Names in Zoology.

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THE FAMILY-GROUP NAME OF THE LEAF-EATING MONKEYS (MAMMALIA, PRIMATES): A PROPOSAL TO GIVE COLOBIDAE BLYTH, 1875, PRECEDENCE OVER SEMNOPITHECIDAE OWEN, 1843, AND PRESBYTINA GRAY, 1825. Z.N.(S.)2094

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The Old World monkeys, family CERCOPITHECIDAE, are usually divided into two groups; the cheek-pouched monkeys, including guenons (*Cercopithecus*), baboons (*Papio*), macaques (*Macaca*) and related forms in the subfamily CERCOPITHECINAE Gray, 1821; and the leaf-eaters, including the African *Colobus* Illiger, 1811 (Official List No. 552, Opinion 122, Directions 10, 22, 24) and the Asian *Presbytis* Eshscholtz, 1821 (including *Semnopithecus* Desmarest, 1822) and other genera in the subfamily COLOBINAE. Some authors consider these two groups of family rank within a superfamily CERCOPITHECOIDEA. The name COLOBINAE (or COLOBIDAE) has generally been used for the leaf-eating monkeys; it is cited with various authors, but formally derives from Blyth, 1875, who first used it in the family-group (as COLOBIDAE: 9). A problem arises because this usage is antedated by two older family-group names for the leaf-eating monkeys.

2. In 1821, Gray included all Old World monkeys known to him in the family CERCOPITHECIDAE, divided into two unnamed "races". In 1825, Gray divided a very broadly construed family HOMINIDAE into several tribes, including CERCOPITHECINA, CYNOCEPHALINA (based on a junior synonym of *Papio*) and PRESBYTINA, with *Presbytis* in the latter. As Kuhn (1967: 38) noted, PRESBYTINA has not been used since its definition (except sporadically by Gray himself, e.g. 1870: 4 but not Gray, 1843).

3. A second name provides more difficulty because it has continued to be used, although rarely. Owen (1843: 55) divided the Old World monkeys into two families, MACACIDAE and SEMNOPITHECIDAE. basing the latter on *Semnopithecus*. From his context, it is clear that he meant these to be equivalent to modern interpretations of CERCOPITHECINAE and COLOBINAE, respectively. SEMNOPITHECIDAE (or SEMNOPITHECINAE) Owen appears to have been used quite infrequently, and then as an alternative to COLOBINAE or in nearly vernacular form. Genet-Varcin (1963) calls the group SEMNOPITHECINAE or COLOBINAE in a heading citing no authorship. Piveteau (1957) uses SEMNOPITHECINAE, but cites the author as Elliot, 1913. This authorship is erroneous, because Elliot was in fact the first to use a *Colobus*-based name (COLOBINAE) at the subfamily level and did not use SEMNOPITHECINAE at all. Jeannin (1936), Bigourdan and Prunier (1937) and Rode (1937) all use the semi-formal "Famille des Semnopithécidés" without citing an author.

4. The vernacular "Semnopithèque" was first used by Cuvier in 1821. He was followed by Desmarest who in 1822 formally proposed *Semnopithecus* for a group of five species, none of which was designated as type. Then, in 1825, Cuvier, in a work on dentition, referred to the Semnopithèque as a new genus. He indicated that the same five species which Desmarest used were included and further said that the "maure" (*S. maurus*) formed the type for this system of dentition (no mention of generic type-species). Pocock (1935) mentioned in a footnote that "The latinized form of F. Cuvier's 'Semnopithèque' which although it contained *entellus* and *melalophus* was obviously from its meaning principally applicable to *entellus* the sacred monkey of the Hindoos.". This statement may not be sufficient to qualify as a type-species designation, but in his book on the *Fauna of British India* (Pocock, 1939: 88), he included only *entellus* in *Semnopithecus* and specifically called it the type-species. Ellerman and Morrison-Scott (1951) accepted this designation. On the other hand, under '*Semnopithecus* Cuvier, 1825' Palmer (1904) wrote "Species (in 1821): l'Entelle (*Simia entellus* Dufresne) from India; and 'le Cimepaye' (*Simia melalophus* Raffles, type) from Sumatra." It has long been accepted that Cuvier is not the author of this genus, nor would a type-"fixation" in 1821 pertain to a later-named taxon. Given the general acceptance of *entellus* as the type-species of the nominal genus *Semnopithecus*, it is best to request the Commission to confirm this designation, as of Pocock, 1939, overruling Palmer's ambiguous indication.

5. The vast majority of modern classifications, both primatological and more broadly-based, employ a *Colobus*-based family-group name for the leaf-eaters, all citing Blyth (or Elliot before the present Code came into effect) for authorship. Among these classifications can be listed those of Chasen, 1940; Simpson, 1945; Ellerman and Morrison-Scott, 1951; Vallois, 1955; Dekeyser, 1955 (Colobidés, no author); Romer, 1966; and Thenius, 1969 (all general classifications). Primatologists employing COLOBIDAE or COLOBINAE include Fiedler, 1956; Hill, 1966; Jolly, 1966; Kuhn, 1967; Napier and Napier, 1967; Dandelot, 1968; Maier, 1970; Thorington and Groves, 1970; and Delson, 1975. It is thus clear that validation of COLOBIDAE as a 'nomen conservandum' rather than preservation of SEMNOPITHECIDAE Owen will encourage universality and preserve general usage. Such validation may therefore be justifiably requested under Article 79b and Article 23d(ii). A similar suggestion was made by Thorington and Groves (1970: 639).

6. In order to preserve the greatest freedom of choice for zoologists without recourse to new names, it is wisest to preserve family-group names based on both *Semnopithecus* and *Presbytis* for use at infra-subfamilial ranks if required. *Presbytis* especially is a well-known and important genus, while *Semnopithecus*-based names have been shown to be still employed by some authors. I suggest that any zoologist who considers that these genera belong to one family-group taxon employ a *Colobus*-based name (COLOBIDAE, COLOBINAE, COLOBINI) in preference to one based on

Semnopithecus, and at lower ranks, a *Semnopithecus*-based name in preference to one based on *Presbytis*, thus preserving not only the availability of those names but also common usage. It is further necessary or valuable to formally place on the relevant Official List the latter two generic names and those of their type-species.

7. I therefore request the Commission to:
   1. use its plenary powers
      (a) rule that COLOBIDAE Blyth, 1875 be given precedence over SEMNOPITHECIDAE Owen, 1843, which is in turn to be given precedence over PRESBYTINA Gray, 1825, by any zoologist who considers that any two of these names denote a single family-group taxon of relevant rank;
      (b) set aside all previous designations of type-species for the genus *Semnopithecus* Desmarest, 1822, made prior to the designation by Pocock (1939) of *Simia entellus* Dufresne, 1797, as the type-species of that genus;
   2. place the following generic names on the Official List of Generic Names in Zoology:
      (a) *Semnopithecus* Desmarest, 1822 (gender: masculine), type-species, by designation under the plenary powers in (1) (b) above, *Simia entellus* Dufresne, 1797;
      (b) *Presbytis* Eschscholtz, 1821 (gender: feminine), type-species by monotypy *Presbytis mitrata* Eschscholtz, 1821;
   3. place the following specific names on the Official List of Specific Names in Zoology:
      (a) *entellus* Dufresne, 1797, as published in the binomen *Simia entellus* (specific name of type-species of *Semnopithecus* Desmarest, 1822);
      (b) *mitrata* Eschscholtz, 1821, as published in the binomen *Presbytis mitrata* (specific name of type-species of *Presbytis* Eschscholtz, 1821);
   4. place the following family-group names on the Official List of Family-group Names in Zoology:
      (a) COLOBIDAE Blyth, 1875 (type-genus *Colobus* Illiger, 1811) with the endorsement that it is to be given precedence over SEMNOPITHECIDAE Owen, 1843, which in turn is to be given precedence over PRESBYTINA Gray, 1825 by any zoologist who considers that any two of these names denote a single family-group taxon of relevant rank;
      (b) SEMNOPITHECIDAE Owen, 1843 (type-genus *Semnopithecus* Desmarest, 1822) with the endorsement that it is not to be used at a given rank by any zoologist who considers that *Colobus* Illiger, 1811 and *Semnopithecus* Desmarest, 1822, belong to the same family-group taxon of that rank and that *Semnopithecus*-based family-group names are to be given precedence over *Presbytis*-based family-group names by any

zoologist who considers that *Semnopithecus* Desmarest, 1822 and *Presbytis* Eschscholtz, 1821 belong to the same family-group taxon;

(c) PRESBYTINA Gray, 1825 (type-genus *Presbytis* Eschscholtz, 1821) with the endorsement that it is not to be used at a given rank by any zoologist who considers that *Presbytis* Eschscholtz, 1821, belongs to the same family-group taxon of that rank as either *Colobus* Illiger, 1811 or *Semnopithecus* Desmarest, 1822, or both.

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XIPHIURUS SMITH, 1847, PROPOSED SUPPRESSION IN FAVOUR OF *GENYPTERUS* PHILIPPI, 1857 (PISCES, OPHIDIIDAE)[1,2]. Z.N.(S.) 2126.

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The genus *Genypterus* is distributed in temperate and cold temperate shelf waters of the Southern Hemisphere. The species of this genus are the largest by far of the family OPHIDIIDAE (*sensu stricto*, excluding the BROTULIDAE) and all are of commercial importance. They comprise one of the most important commercial fisheries of Chile and are held in high esteem and are of high value in Argentina, South Africa, and New Zealand. The species are of less importance in Australia and Peru where they are over-shadowed by other fisheries.

2. *Genypterus* was proposed by Philippi (1857) with *Genypterus nigricans* Philippi the type-species (by monotypy). *Genypterus nigricans* has long been regarded as a synonym of *G. chilensis* (Guichenot). Earlier, Andrew Smith (1847)[3] had proposed *Xiphiurus* with *Xiphiurus capensis* Smith as its type-species (by monotypy). That *capensis* and *chilensis* are congeneric is not in contention. They were treated as generic synonyms by Günther (1862) and have been so regarded by all subsequent workers. Authors of the nineteenth century commonly regarded as preoccupied those names that differed by one letter or in ending only. Kaup (1858) meanwhile proposed *Hoplophycis* with *H. lalandi* Kaup as the type-species (by monotypy). Günther (1862) regarded *Xiphiurus* as preoccupied [by *Xiphiura* Fallén (1813) (Insecta, Hymenoptera)] and correctly recognized that *Genypterus* Philippi predated *Hoplophycis* Kaup and so indicated in his synonymy of the genus. He further relegated *H. lalandi* to the synonymy of *Genypterus capensis*. Inasmuch as the articles by Philippi (1857) and Kaup (1858) were published in successive volumes of the same journal, there is no question concerning the fact that *Hoplophycis* is junior to *Genypterus*.

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2 We thank Lillian P. Dempster, California Academy of Sciences; Daniel M. Cohen, National Marine Fisheries Service; and Frederick M. Bayer, University of Miami, for advice and Comment.

3 Although Smith's Illustrations of the Zoology of South Africa is generally regarded to have been published in 1849, Waterhouse (1880, *Proc. zool. Soc. Lond.*) showed that the various parts appeared from 1838 to 1849, that with *Xiphiurus* in 1847.

Whether Günther was correct in his allocation of *Hoplophycis* we are unable to determine but it is immaterial to this case. Later, when such small differences in spelling were ruled sufficient to preclude homonymy [Article 57(d)] the name *Xiphiurus* was not resurrected. Thus, to our knowledge, *Genypterus* was universally applied to this genus of commercially important fishes from 1862 until 1968 when Abe and Arai noted that *Xiphiurus* was the earliest available name and used it for *X. blacodes*. In fact, this combination was employed in an earlier paper in the same journal issue by Inoue, Arai and Abe (1968).

3. That *Xiphiurus* is not preoccupied by *Xiphiura* and that it predates *Genypterus* are beyond dispute. The writers believe that to upset 106 years of universal usage for a group of animals so widely reported on in fisheries literature and in basic faunal reports is to do a disservice to biology and fisheries science. By way of example, the following reports employ *Genypterus:* for South Africa - both major faunal treatises, those by Barnard (1927; also his more popular work, 1947) and J.L.B. Smith [1949 and four subsequent editions; as well as his article on 'Kingklip' (1971: 253) in the section on fishes in the Standard Encyclopedia of Southern Africa]; for Australia — Scott (1962) and Whitley (1964); for New Zealand — Graham (1953), Heath and Moreland (1967), and Whitley (1968); for Peru — Chirichigno Fonseca (1968 and Chirichigno 1974); for Chile — Mann (1954), De Buen (1959) and Miranda Brandt (1968); for Argentina — Norman (1937), Hart (1946), Angelescu, Gneri & Nani (1958), and Ringuelet and Aramburu (1960); for Uruguay — De Buen (1959); and for Brazil — Fowler (1941). It is also used by the Food and Agricultural Organization of the United Nations (FAO, 1974) in their annual digest of fishery statistics.

4. From a systematic standpoint, the genus *Genypterus* is in need of revision and such a study has been under way for some years by the senior author. All nominal species have been studied and no change in the generic limits is contemplated. Robins (1962) used the name *Genypterus* in his key to eastern Pacific species of LEPOPHIDIINAE even though he was aware of the status of *Xiphiurus*. Prof. J.L.B. Smith and the senior author had discussed this matter about the same time. Regan (1903) in one of the few comparative treatments of species in the genus, similarly used *Genypterus*.

5. The International Commission on Zoological Nomenclature has indicated recently (1972) that long established names should not be overturned for reasons of priority [Article 23(a-b)] and has provided guidelines to be used in requesting suppression of names like *Xiphiurus*. The papers cited above exceed the requirements suggested [Article 79(b)]. They were selected to show the universality of application of *Genypterus*. No effort was made to document the extensive literature of the genus.

6. The applicants therefore request the International Commission:

(1) to use its plenary powers to suppress for the purposes of the Law of Priority but not for the Law of Homonymy the generic name *Xiphiurus* Smith, 1847;

(2) to place on the Official List of Generic Names in Zoology: *Genypterus* Philippi, 1857 (gender: masculine), type-species under Article 68(c) *Genypterus nigricans* Philippi, 1857 [= *Genypterus chilensis* (Guichenot)];

(3) to place on the Official List of Specific Names in Zoology the specific name *chilensis*, as published in the binomen *Conger chilensis*, by Guichenot, 1849, *in* Gay, C. *Hist. fis. polit. Chile*, Zoologia vol. 2: 339;

(4) to place on the Official Index of Rejected and Invalid Generic Names in Zoology: *Xiphiurus* Smith, 1847, rejected under (1) above.

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INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

FINANCIAL REPORT 1974

There was an excess of expenditure over income during 1974 of £2,976 (£1,592). The figures in parentheses are the figures for 1973.

As a result there was a reduction in the accumulated reserve arising from previous surpluses and this now stands at £2,660

Under Income, the sale of publications produced £3,893 (£3,635) and total income was £5,576 (£5,405).

Under Expenditure, publications cost £3,767 (£2,762) and Administrative Expenses £4,806 (£4,091).

It is evident that the Trust is suffering from the general effects of inflation and rising costs and clearly urgent steps must be taken to deal with the situation.

The sole source of revenue is from the sale of publications and it is difficult to see this source providing sufficient revenue to meet expenditure. Alternative sources of income must be found and found soon.

INTERNATIONAL TRUST FOR

Incorporated under the Companies

Balance Sheet —

1973 £	£		£	£
		Revenue Reserves		
	10,000	General Reserve	10,000.00	
	2,659	"Official List" Suspense Account (per separate account)	2,656.63	
	5,637	Income and Expenditure Account (per separate account)	2,660.49	
18,296				15,317.12
		Current Liabilities		
	—	Short Term Loan	2,000.00	
	2,733	Sundry creditors	2,652.11	
	510	Subscriptions to publications received in advance	293.23	
3,243				4,945.34
21,539				£20,262.46

REPORT OF

In our opinion the above Balance Sheet and annexed Income and Expenditure Account give
1974, and of the result for the year ended on that date and comply with the Companies Acts,

KNIGHTWAY HOUSE,
20 SOHO SQUARE,
LONDON, WIV 6QJ.
3rd July, 1975

ZOOLOGICAL NOMENCLATURE

Act, 1929 (Limited by Guarantee)

31st December, 1974

1973 £	£		£	£
		Fixed Assets		
		Office Equipment —		
		Book value at 1st July 1948		
1,285		and additions since at cost	1,285.52	
996		*Less:* Depreciation and amount written off	1,025.69	
289				259.83
		Investments at cost		
14,354		£14,500 9% Treasury Loan Stock 1994	14,353.67	
		Market value at date £7,975		
		£5,000 City of Cambridge 7% 1978		
5,016		Redeemable Loan Stock	5,016.23	
		Market value at date £3,850		
19,370				19,369.90
		Current Assets		
		£ £		
		458 Amounts due for publications 294.44		
		248 Income Tax recoverable 57.75		
		-- Value Added Tax recoverable 45.55		
706			397.74	
1,174		Balances at bank and cash in hand	234.99	
1,880				632.73
21,539				20,262.46

NOTE: The Stock of Publications has not been valued

FRANCIS J. GRIFFIN) Members of the Committee
C.W. WRIGHT) of Management

THE AUDITORS

respectively a true and fair view of the state of the Company's affairs as at 31st December, 1948 and 1967.

NORTON KEEN & CO.,
Chartered Accountants

Income and Expenditure Account for

1973		EXPENDITURE		
£	£		£	£
252		Conference Expenses		
		Administration Expenses —		
	2,840	Salaries, National Insurance, etc.	3,704.37	
	1,191	Office Expenses	1,041.82	
	60	Audit Fees	60.00	
	4,091		4,806.19	
	50	*Less:* Proportion allocated to "Official List"	50.00	
4,041				4,756.19
32		Depreciation of Office Equipment		28.86
		Printing and Distribution of Publications —		
2,672		Bulletin of Zoological Nomenclature		3,767.41
£6,997				£8,552.46
1,592		Balance brought down		2,976.50
5,637		Balance carried forward to Balance Sheet		2,660.49
£7,229				£5,636.99

"Official List"

for the year ended

1973		£
£		
50	Proportion of Administration Expenses	50.00
2,658	Balance carried forward to Balance Sheet	2,656.63
£2,708		£2,706.63

the year ended 31st December, 1974

1973		INCOME		
£	£		£	£
£	£		£	£
		Sales of Publications —		
	256	International Code	196.12	
	3,369	Bulletin of Zoological Nomenclature	3,696.38	
3,625				3,892.50
25		Donations		5.00
1,655		Interest Received on Investments (gross)		1,655.00
100		Interest on Bank Deposit		23.46
		Balance, being excess of Expenditure over Income for		
1,592		the year, carried down		2,976.50
£*6,997*				£8,552.46
7,229		Balance brought forward from 1973		5,636.99
£*7,229*				£5,636.99

Suspense Account

31st December, 1974

1973		
£		£
2,642	Balance brought forward from 1973	2,658.65
66	Sales of Publications	47.98
£*2,708*		£2,706.63

SHOULD MICROFORM METHODS BE ACCEPTED AS VALID METHODS OF PUBLICATION UNDER THE CODE? Z.N.(S.) 2182

By R.V. Melville (*Secretary, International Commission on Zoological Nomenclature*)

This paper presents some of the arguments for and against the acceptance of modern methods of production — in particular microform — as valid methods of production under the Code. Microform is at present excluded under Article 9. The intention is to canvass the opinion of zoologists for the guidance of the Editorial Committee which is at present preparing the Third Edition of the Code.

2. In January 1976 Dr Ellis L. Yochelson, in his official capacity as President of the Paleontological Society of America, wrote to Dr Ride, as President of the International Commission on Zoological Nomenclature, in the following terms: "I have been directed by the Council of the Paleontological Society to ask that the International Commission on Zoological Nomenclature give immediate consideration to possible changes in the current wording of Article 9 (1) of the code, on what does not constitute publication. A number of groups in America share our concern about this provision and, if required, additional letters in support of our request will be sent."

"We are particularly concerned with microfiche. The paleontological community is now faced with the fact of microfiche. A particular paleontologist had to choose between having his work produced by the Geological Society of America in microfiche, or not at all; he chose microfiche. The enclosed letter from Dr John C. Frye, Executive Director of the Geological Society of America [see para. 4 below], shows that there was no question of discrimination against a taxonomic paper as such. The decision to use microfiche was based on harsh economic facts. It seems inevitable that now that this major paleontological contribution has appeared in microfiche, others will follow."

"On this occasion, a short paper giving just enough information to make the names of new taxa available was published in advance of the microfiche edition. However, if you refer to any library copies of the two works you will see that the illustrations on the microfiche are of better quality than those in the advance paper (I do not need to tell you that, in paleontology, taxonomic work is judged largely by the presence or absence of illustrations, and by their quality if they are provided)."

"The microfiche text is accompanied by four cards which photographically reproduce the author's plates at the same size as the microfiche cards. These illustrations are more numerous and of better quality than those in the advance paper in *Geology*. However, it is not

certain whether these were prepared from the author's originals, or enlarged from the one-twentyfourth reduction on the microfiche. I have been told that attemps to make enlargements from the microfiche reduction have met with indifferent success."

"Nobody with whom I have discussed this question is enthusiastic about microfiche, but if workers are faced with a choice between microfiche and not communicating the results of years of study, there is no question that they will choose microfiche."

3. Dr Yochelson sent a copy of his letter to the Secretary to the Commission, together with a copy of the following letter from Dr John C. Frye, Executive Director of the Geological Society of America: "I am writing in the hope that you will send my letter to the International Commission. As you know, I am aware that microfiche is not accepted as 'publication' under some Codes. The sooner this is clarified, the better it will be for the progress of science."

"The Geological Society of America is the largest non-governmental publisher of geological papers in the western hemisphere. We have published thousands of pages of paleontological monographs as *Memoirs* and *Special Papers*, as well as in our two monthly journals. Papers accepted for publication by the Society are judged solely by scientific merit; we do not publish for profit and traditionally have subsidised part of our publication costs from endowment income. The Society commonly loses money on its periodical publications because the number of sales is small."

"Our decision to institute microfiche publication is based entirely on economic considerations as our endowment income has declined during the same period as publication costs have rapidly risen. We shall not limit our microfiche series to paleontology, but use it for any papers for which it seems appropriate. To date, we have published three works in microfiche format: (1) *Environmental geology*: *a selected bibliography;* (2) *Mineral resources of China;* and (3) *Pennsylvanian conodont biostratigraphy and paleontology of northwestern Illinois*."

"No doubt it is the last-named paper, by Dr Glen K. Merrill, that has sparked the inquiry concerning microfiche. Dr Merrill investigated other media for publication, but none were available to him for his paper. The Geological Society of America judged that his work was certainly worthy of publication, but we were simply unable to publish it by standard letterpress printing. I must emphasize that the Society did not force microfiche on Dr Merrill. He was faced with either publishing his work in a form that does not satisfy the International Code of Zoological Nomenclature, or not publishing his work at all. It is obvious to me that the science is better off for having the work in microfiche than not at all."

"We published, prior to the release of *Microform Publication* No. 3, a short paper in *Geology*, vol. 3, no. 12: 721-722, December 1975, in which Dr Merrill published enough information to make his names available under the Code. However, anyone who wants detailed information on synonymy,

occurrence, assemblage and other points that make a monograph more valuable than a short paper, is going to have to consult the microfiche."

"If other authors of paleontological monographs approach us to publish their works, and we think it appropriate for microfiche, then the Society will offer them that option. It is my feeling that authors will increasingly take this option rather than let their work go unpublished. As a result, a great deal of 'gray' literature may develop which is published in the opinion of some, but not in the opinion of others. So far as the Geological Society of America is concerned, our only alternative to microfiche is to refuse most works in paleontology; we do not choose to penalise a competent earth scientist who wants to publish."

"I hope that you can have this issue resolved in the near future. You will be able to see for yourself that Dr Merrill's work is a handsome product, easily read under a binocular microscope. Regardless of the requirements of Article 9 of the International Code of Zoological Nomenclature, I expect there will be many more microfiche publications in the next few years."

4. The following extract from a letter dated 10 May 1976 by Dr Merrill shows how carefully he had considered the arguments on both sides of the case before accepting the Geological Society of America's offer of microfiche:

"I quite agree with you about the importance of any decision to change the provisions of Chapter III of the Code and on the need to proceed with caution. It is also imperative that any change that accepts (among others) the Geological Society of America's Microform Series be so constructed as to exclude microfilmed theses, dissertations and the like. The revised provisions should, in my view, (a) set out new criteria for deciding what is, and what is not ' publication ', and (b) set an effective date for the implementation of those criteria so as to exclude previously unacceptable works that happen to satisfy them. Questions about individual works published before that date should, by analogy with cases of binomina published before 1758, be decided by the Commission."

"The difficult task of defining the new criteria will not be made any easier by the fact that scholarly works will undoubtedly appear in media other than ink-on-paper with increasing frequency. It therefore seems prudent for the Commission at least to consider alternative definitions before the pressure of custom and usage destroys all chance of deliberate contemplation. It is not as though there was any magical virtue in the ink-on-paper process; there are cases of works in which not only the illustrations, but even the text pages are of a quality that makes any claim to superiority absurd. Some are produced on paper so perishable that it is necessary to photograph them if their content is to be preserved. In other cases, some ink-on-paper editions are produced even in modern times in such small numbers that their authors are obliged to produce their own separates by photography if their work is to be known to their colleagues in other countries. The present Code does not prevent some frankly unsatisfactory productions from ranking as publications. Is there really any

logical reason to attach overwhelming importance to *process* at the cost of totally disregarding both *quality* and *accessibility*?"

"You and other colleagues have mentioned some of the disadvantages of microfiche. There are also many advantages, not only to publishers and librarians, but also to practising zoologists and palaeontologists. The most obvious ones are the lower costs of production and distribution and the ease with which otherwise unobtainable works can be placed within the reach of those who need them. It is now possible to buy microfiche readers that fit inside an attaché case, so that a zoologist can now take all the relevant literature with him when he visits some remote museum, or even into the field. Negative and positive films and fiches can be produced of a quality to satisfy the most demanding specialist, or, more cheaply, for the worker whose interest is only peripheral. Modern photographic materials permit any reasonable degree of magnification and enable publishers to offer a variety of illustrations to the purchaser."

"I believe that Dr Yochelson chose my works merely as a test case, to show the inequalities and circumventions that the present Code forces upon us. I agree with his motives, for although my new names were made available by prior ink-on-paper publication, this is not the case with other works. (From external evidence, the date of the letterpress edition of *Geology*, vol. 3 (12) is to be cited, under Article 21f, as [17 November 1975] and that of Microform Publication No. 3 as [22 December 1975]). I do not suggest that changing Chapter III will prevent authors from making errors — ignorance of any new provisions will doubtless be as widespread as that of the present ones — but it will allow knowledgeable potential authors to choose between several options for the fate of their manuscripts."

5. Dr Frye's exposition of the stand taken by the Geological Society of America leaves no room for misunderstanding: the richest and most powerful geological society in the New World will continue to publish palaeontology, and to publish it in microfiche, without regard for the provisions of the Code or for the reasons that underlie them, because of economic pressures. The Commission's Secretariat would be interested to learn of other societies that have been forced by economic circumstances to publish zoological papers in microfiche or other microform. At present we know of none.

6. Dr Yochelson has also formally applied to the Commission (with the support of Professor G. Klapper, *Department of Geology, University of Iowa, Iowa City, Iowa 52242, U.S.A.*) for the following work to be placed on the Official List of Works Approved as Available for Zoological Nomenclature: Helfrich, C.T., 1975, Silurian Conodonts from Wills Mountain Anticline, Virginia, West Virginia and Maryland. *Geol. Soc. America, Special Paper* 161, 16 plates, one microfiche. He now wishes, however, this application to be held in reserve pending resolution of the general question. The paper is a "hybrid" from the point of view of the present discussion. The plates and their explanations do not satisfy the criteria of availability for new names published after 1930 (although they are

enough in this case to make the names valid in palaeontological usage); the text is not intended to make any of the new names available, though it does so in one or two cases incidentally. It is the microfiche card that provides the descriptions upon which the availability of most of the new names must depend. But the microfiche must be regarded as a forbidden means of publication under the present Code.

7. The Commission must obviously take a larger view than that of a particular learned society. It must consider the interests of all zoologists everywhere and at all times. In examining the relevant provisions of the Code in the light of the letters from Dr Yochelson and Dr Frye, it may well be led to examine the fundamental reasons why the Code includes any provisions governing publication, and the objects which those provisions are intended to attain. There seems to have been little, if any, careful thought given to the positive aspects of this question. The existing provisions are mainly designed to exclude certain obviously objectionable methods of publication. These are mainly methods that restrict the availability of a new work to a public limited *a priori* — as is the case with a note distributed to colleagues or students, with (in normal circumstances) the distribution of proof sheets, and with mention at a meeting. The mere deposit of a document in a library is likewise not acceptable as publication on purely practical grounds.

8. One of the few attemps to look at the problem in a positive way seems to have been made by the late Professor Chester Bradley in his draft Code (1957, *Bull. zool. Nomencl.* vol. 14: 64-65). His "discussions" show that he clearly saw that the objects to be attained include (a) a process capable of large-scale reproduction of identical copies; (b) a reasonable prospect of permanency, and (c) availability without prior restriction to any person, physical or moral, who may apply for a copy. Although his words, written in 1957, clearly relate to the ink-and-paper technology of that day, the objects he mentions ought surely to be the aim of every method of publication admitted by the Code. It has, for example, been suggested to me that "publication" could be established by an announcement that a microform producer held a copy of a work and a photographic negative of it, from which either full-size or microform copies could be supplied on demand. This would surely not be adequate. Research work and identification services cannot wait while copies of relevant works are manufactured to meet individual orders. It is, of course, much easier for a publisher to hold one copy of a work and a negative than to hold matter set in standing type or as stereotypes, but that fact must not be allowed to lower the requirements for wide simultaneous distribution inherent in the definition of "publication".

9. Dr W.D.L. Ride, President of the Commission, suggests (in correspondence) that the purpose of defining "publication" in the Code is to provide an unambiguous physical criterion from which one of the conditions necessary to availability can be assessed. Once the physical fact of publication has been established, it is then possible for a zoologist to

decide whether the nomenclatural criteria are also met, and to establish the date of publication so that questions of priority can be answered. But these advantages, and the still more important one of judging the taxonomic validity of a name, can only be gained if the publication of the work is first ascertained. Dr Merrill's suggestion, that the fact of publication be established less by reference to process and more by reference to quality and accessibility, is examined further in paragraph 14 below.

10. Doubts have been expressed as to the permanency of microform; it has been alleged that microfilms and microfiches are liable to deteriorate if not stored in conditions of controlled temperature and humidity. This might be held to impose practical restrictions on the general availability of a work on grounds of cost and, in the long-term future, the availability of the energy needed to maintain constant conditions.

11. A further requirement that ought to be kept in mind is quality from the point of view of legibility. Admittedly, as Dr Merrill has shown in para. 4 above, traditional letterpress printing — not to mention duplicating, which is not excluded by the Code — is not a certain guarantee of quality in this respect; and in palaeontology, where illustration is generally critical to the utility of a work, quality of reproduction may make the difference between a valid name and a nomen dubium. There is no doubt that microform methods can produce results of the finest quality. But it is also true that the camera cannot discriminate between a good and a bad original. Matter written in barely legible or ambiguous handwriting accompanied by obscure illustrations will be reproduced by the camera with the same fidelity as the finest printing. How is it possible to define criteria of quality that will exclude the worst products from gaining currency?

12. There are also practical difficulties in the use of microfilms and michrofiches. The palaeontologist, for example, needs to compare the material before him with as many relevant illustrations as possible, and to do so as directly as possible. This is easy with conventional books and papers; it is not easy with works produced in microform, which must be viewed one at a time in a special reader or under a microscope. To make enlargements from microform is costly and time-consuming, and there are doubts as to the quality of illustrations produced in this way.

13. On the other hand, the advantages of microform are manifest. It is relatively quick and cheap; a research worker can carry a large amount of literature from place to place without difficulty; and it is incomparably more economical in storage space from the librarian's point of view. It is thus not a question of whether, but how microform methods of production are to be admitted to the category of methods accepted by the Code.

14. One way in which the fact of publication could be established by reference to quality and accessibility, as Dr Merrill suggests, rather than by reference to process, would be to establish a register of acceptable publications which gave firm guarantees of quality of reproduction and breadth of simultaneous first distribution, and to rule that only names published in those works would be available — provided, of course, that the

relevant criteria of Chapter IV of the Code were also satisfied. There are two immediately obvious objections to this proposal. One is the bureaucratic overhead load imposed by such a scheme; the other is the possibility of abuse by the arbitrary exclusion of some authors' works for non-scientific reasons.

15. Dr Ride has suggested that the requirement of breadth of first distribution might be limited to deposit of copies in one or more of a listed set of major libraries, such as national copyright libraries. To my mind, while such an act may suffice to establish publication in law, it is not enough to establish "availability" in the sense of the Code. For that to be satisfied, deposit of a copy in a copyright library would have to be made in good faith as proof that the work was simultaneously available to a non-exclusive public. If it is claimed for modern methods of production that they make it easier than before for everybody to have access to publications, then it is inconsistent to reduce existing requirements below the level of the best current practice with works produced by conventional printing methods.

16. Two further controls of quality have also been suggested. One would be to outlaw, as from a set date, all matter produced by such methods as mimeographing, hectographing and xerography as such; the other would be to limit acceptable microform methods to microfiche and to exclude microfilm. This takes account of the more sophisticated equipment and technique required for producing microfiche.

17. To sum up, the Commission would welcome comments on the following questions:

(1) Is it generally agreed that the availability of publications should be judged in future by quality and breadth of first distribution, regardless of process?
(2) Is it felt that some processes — e.g. mimeographing, microfilm — should nevertheless be excluded? If so, how are they to be defined?
(3) Is it generally agreed that quality control is best achieved by restricting the number of vehicles of publication? If not, how can it be achieved?
(4) What views are held about accessibility ? Would restriction of first distribution to a listed set of libraries be acceptable?

No doubt there are aspects of the problem of "what constitutes publication" that are not examined in this paper. Discussion of any such aspects would be welcomed. Meanwhile, pending resolution of the wider issue, it is urgently requested of all authors and editors that they ensure that the minimum requirements of the Code are met, regardless of what methods they use to reinforce the validity of their new names.

PLEUROCERA RAFINESQUE, 1818 (GASTROPODA): PROPOSED DESIGNATION OF TYPE-SPECIES UNDER THE PLENARY POWERS. Z.N.(S.)83

By R.V. Melville (*Secretary, International Commission on Zoological Nomenclature*)

The question of the type-species of the North American freshwater gastropod genus *Pleurocera* Rafinesque, 1818, has already been the subject of two complementary reports to the Commission. The first, by the late Francis Hemming, was published in 1951 (*Bull. zool. Nomencl.* vol. 2: 6-17) and the second in 1960 (*Bull.* vol. 17: 170-174). The case was not carried to a conclusion on the latter occasion because of difficulties about the family-group names involved. These difficulties ought not to be allowed to prevent a decision being reached in the most important part of the case, namely, the type-species of *Pleurocera*.

2. The case was sufficiently important to call for an early decision when it was first brought before the Commission by the late Dr H.A. Pilsbry in 1925. It has now acquired added urgency because *Pleurocera* has shown itself to be a sensitive indicator of pollution and of the efficacy of counter-measures to pollution. At this distance in time since the earlier reports were published, it is necessary to repeat the facts about the generic name and re-state the case for the proposed designation of type-species. The problems concerning the family-group names will also be explained. On this occasion, however, if there is a clear expression of views from zoologists on the type-species question, that part of the case will be put to the Commission for a vote as soon as practicable. If there is clarity on the family-group name problems, they too will be voted on; but if there is doubt or confusion, their resolution will be postponed so as not to delay the main issue.

3. The early history of *Pleurocera* is as follows. The name was first proposed by Rafinesque (1818, *Amer. mon. Mag. crit. Review*, vol. 3: 355) with a description and with six specific names cited as follows: "*retusa, saxatilis, fasciata, coneola, angulata, turricula,* Raf." All were nomina nuda, so that the genus was established without any included nominal species.

4. In 1819, (*Jl Phys. Chim. Hist. nat.*, Bruxelles, vol. 88: 423) *Pleurocera* was given a description in French not altogether in harmony with that which it had received in 1818. No species was mentioned. (Neither of these two publications has been seen in the original. They are quoted here from Binney, W.G. & Tryon, G.W. Jr., 1864, *The complete writings of Constantine Smaltz Rafinesque on Recent and fossil conchology*, 96 + 7 pp., New York.)

5. In 1820 (*Annals of Nature or Annual Synopsis* ... first annual number for 1820) Rafinesque divided the animal kingdom into ten classes. In the eighth (Apalosia, the Mollusca), five genera are described, including *Pleurocera* (as well as three new genera). One species, *Pleurocera verrucosa,* is described, and this therefore is the type-species by subsequent monotypy (Art. 69a (ii) (2). Rafinesque added: "This genus which contains nearly twenty species of fluviatile shells, was described in my 70 N.G. Animals, &c.". He thus associated the name with the description given in his 1819 paper, entitled "De 70 nouveaux genres d'Animaux découverts dans l'intérieur des Etats-Unis d'Amérique en 1818", rather than with that given in 1818. However, as Dr Pilsbry pointed out in a letter of 1928 to Dr Stiles, the description of *P. verrucosa* was not consistent with the 1819 description of the genus.

6. In 1831 Rafinesque (*Enumeration and Acccunt of some remarkable natural objects of the cabinet of Prof. Rafinesque in Philadelphia,* 8pp., Philadelphia: 2-3) redescribed *Pleurocera* and placed three new species in it — *P. gonula, P. acuta* and *P. quadrosa,* all described — and added "This is my G. *Pleurocera,* 1819".

7. After this, the generic name seems to have fallen out of use for a time — perhaps partly because of Rafinesque's low reputation among his contemporaries, and partly because of the authority attached to the work of Isaac Lea. The first subsequent use of it seems to have been by S.S. Haldeman, 1863, *Proc. Acad. nat. Sci. Phila.* for 1863: 273-4, who revived it in place of *Goniobasis* Lea, 1862, and other synonyms. This was not, however, the basis of subsequent usage of *Pleurocera.* Current use would appear to stem from G.W. Tryon's "Synonymy of the species of Strepomatidae", *Proc. Acad. nat. Sci. Phila.* for 1863: 306-321, where he attributed the name to Rafinesque, 1819, and used it (as a subgenus of *Io* Lea, 1831 !) to include *Ceriphasia* Swainson, 1840 and *Trypanostoma* Lea, 1862. He referred *Melania canaliculata* Say, 1821 to *Pleurocera,* but that name was then regarded as a synonym of *P. acuta* Rafinesque, 1831.

8. In 1865 (*Amer. Jl Conch.*, vol. 1: 97-135) Tryon confirmed his earlier interpretation of *Pleurocera* and expressly excluded *verrucosa* from it in the following passage (: 110): "Rafinesque published several species; one of which, *P. verrucosa,* is identical with *Lithasia nupera* Say, and therefore belongs to an entirely different group. Others, however, are evidently closely related to *M.* [*elania*] *canaliculata* Say and *M. elevata* Say. The genus is certainly well characterised, and clearly includes those shells which Mr. Swainson has subsequently distinguished as *Ceriphasia,* and Mr Lea as *Trypanostoma.*" Tryon was, of course, wrong to exclude *P. verrucosa,* the type-species (see para. 5 above), from *Pleurocera,* but the considerable subsequent literature on the genus has nearly all followed his lead.

9. Hannibal (1910, *Proc. malac. Soc. London* vol. 10: 169) "designated" *P. verrucosa* Rafinesque as type-species of *Pleurocera,* although under the Code as it stands today that was clearly unnecessary.

He criticized previous workers for regarding *Melania canaliculata* Say as typical of *Pleurocera* without expressly identifying it with any of Rafinesque's species and identified *P. acuta* with *Gonlobasis virginica* (Gmelin) (erroneously). Pilsbry (1917, *Nautilus* vol. 30: 110) accepted Hannibal's conclusion. He replaced *Pleurocera* of authors by *Ceriphasia* Swainson.

10. Walker (1917, *Occ. Pap. Mus. Zool. Univ. Michigan,* vol. 38: 4-8) showed that *P. verrucosa* did not fit the criteria of the Code as it then stood, as interpreted by Opinion 46 for genera proposed without any included species, and (: 9) designated *P. acuta* as type because, under that ruling, it was "the first identifiable species described as *Pleurocera* and complying with the original generic diagnosis" and therefore was automatically "the only species available as type". He treated *Melania subularis* Lea, 1831, as a synonym. His exposition of Opinion 46 was as clear as any explanation of that obscure judgement could be, and it is not surprising that a majority of users of the names concerned accepted his arguments as valid under the Code as it then stood. They also naturally agreed with his view that the acceptance of *P. verrucosa* as type entailed the reversal of 50 years' usage.

11. This was the state of things when, in 1925, Dr Pilsbry wrote to Dr Stiles, the then Secretary to the Commission, asking for a ruling on the type-species of *Pleurocera*. Dr Stiles collected various expressions of opinion from specialists to the effect that *P. verrucosa* must be the type under the Code; but Dr Pilsbry stoutly maintained that usage favoured *P. acuta* and that most workers had ignored Hannibal's paper. The case was not at that time (1928) brought before the Commission.

12. When Mr Hemming, as Secretary to the Commission, read through the papers on this case in 1944, he first sought information on usage since the last communication from Dr Pilsbry in 1928. Three references were found, all using *Pleurocera* as though *acuta* were its type-species: C. Goodrich's "Studies on Pleuroceridae" (treated as one reference) in *Occ. Pap. Mus. Zool. Univ. Mich.* vol. 12 (286), 1934 and (295), 1934; vol. 13 (300), 1934, (311), 1935 and (318), 1935; vol. 14 (347), 1937 and (376), 1938. H.J. van Cleave, *Nautilus*, vol. 46: 29 (1932) and vol. 47: 48 (1933). Kindle, 1934 (*Bull. Wagner Free Inst.* vol. 9: 136). Dr Pilsbry and Dr van Cleave still held that stability would best be served by the designation of *P. acuta* as type-species; but Dr Rehder, supported by Dr Bartsch and Dr J.P.E. Morrison, held that *P. verrucosa* should remain the type, in conformity with their view of the Code as it then stood. Mr Hemming recommended that the plenary powers should be used to designate *P. acuta* as type-species. He was supported by Mr Joshua L. Baily, Jr., and Dr Emilio Berio and opposed by Professor C.R. Boettger and Dr J.P.E. Morrison. Dr Rehder wrote to ask that the question be left until the classification of the PLEUROCERIDAE was better understood. Mr Hemming tried in 1952 and 1956 to get further advice from specialists, but without success.

13. The case was reopened in 1959 as the result of an inquiry by Dr Joseph Rosewater (*Museum of Comparative Zoology, Cambridge, Mass.*). He provided 16 references to works published between 1944 and 1958 in which *Pleurocera* had been used as though *P. acuta* were its type-species, and two (one of which is an abstract of the other) in which it has been used as though *P. verrucosa* were its type:

In the sense of *P. acuta:*

Goodrich, C., 1944. *Occ. Pap. Mus. Zool. Univ. Mich.* (485): 5

————, 1944. *Nautilus,* vol. 58: 43

————, 1944. *Misc. Pub. Mus. Zool. Univ. Mich.* (64): 5, 27

———— & van der Schalie, H., 1944. *Amer. Midland Nat.* vol. 32: 259, 302-303

Stenzel, H.B. & Turner, F.E., 1944. *Amer. Jl Sci.* vol. 242: 289-308

———— & Hesse, C.J., 1944. *Bull. amer. Assoc. Pet. Geol.* vol. 28: 977-1011

Robertson, I.C. & Blakeslee, C.L., 1948. *Bull. Buffalo Soc. nat. Sci.,* vol. 19: 90

Pennak, R.B., 1953. *Freshwater invertebrates of the United States.* New York.

Schrock, R.R. & Twenhofel, W.H., 1953. *Principles of invertebrate paleontology.* New York.

La Rocque, A., 1953. *Bull. nat. Mus. Canada* vol. 129: 272

Clench, W.J., 1954. *Syst. Zool.,* vol. 3: 123-124

Ingram, W.M., 1956. *Jl Amer. Waterwork Assoc.* vol. 48: 258, 259, 264

————, 1957. *In* Biological problems in water pollution. Trans. seminar ... water pollution. U.S. Dept Health, Educ. Welfare, Public Health Service, Cincinnati, Ohio

Rosewater, J., 1959. *Nautilus* vol. 73: 57-63

————, 1960. *Bull. amer. malac. Union* (26): 10-12

Clench, W.J., 1959. Mollusca *in* Ward & Whipple, *Freshwater biology* (2nd ed.): 1137.

In the sense of *P. verrucosa:*

Morrison, J.P.E., 1952. *News Bull. ann. Rep. amer. malac. Union* for 1951 : 7

————, 1954, *Proc. U.S. nat. Mus.* vol. 103: 362-363.

14. Dr Rosewater added the following comment on the outcome of a strict application of the Code to this case: "If *verrucosa* is accepted as type-species of *Pleurocera,* then that generic name will no longer be applied to the group of which *acuta* is a member, but to the group which has been known by the name *Lithasia* Haldeman, 1841, with few exceptions, for over 50 years. The then nameless *acuta*-group will fall a prey to one of two eventualities: either it will have resurrected for it the earliest available synonym, *Ceriphasia* Swainson, 1840, or it will be combined with another generic group, *Goniobasis* Lea, 1862 (Dr Morrison uses the generic name *Oxytrema* Rafinesque, 1819 for this combined genus). In my opinion there is insufficient evidence for this combination, and the smallest actual change

in nomenclature will result from *making the change* which has already been recommended by Mr Hemming. The argument that modern taxonomic work would produce so many small genera that it would not matter very much which of them was called *Pleurocera* does not seem a valid one to me. Modern work has tended to reduce the numbers of species within the genera by synonymizing variable forms or by reducing them to subspecies. This alone makes for small genera. We already have them in PLEUROCERIDAE, and they have been understood by malacologists according to concepts and usages during nearly three generations. It *does* matter which genus is called *Pleurocera*, because what has been called by that name has been recognised for so long and is still being used in this sense by most workers in North America. To call *verrucosa* and its allies *Pleurocera* would change a nomenclaturally-linked generic concept of long standing."

15. Professor Henry van der Schalie sent in, and seconded, an opinion written by Dr John B. Burch in the same sense as Dr Rosewater's proposal. This was also supported by Mr Baily (see paragraph 12 above) and by Dr Horace B. Baker (*Haverton, Pennsylvania*), Dr Dwight W. Taylor (*U.S. Geological Survey*), Dr Fritz Haas and Dr Alan Solem (*Chicago Natural History Museum*), Dr Harold J. Walter (*Liberia, W. Africa*), Dr Dolores Dundee (*Louisiana State University*) and Dr E. Malek (*Tulane University, Louisiana*). Opposition was expressed by Dr Arthur Clarke (*Canada Department of Northern Affairs and Natural Resources*).

16. The course of action which the Commission should take to safeguard stability of nomenclature — at least in the sense in which the names were used up to 1960 — is thus clear. It should use its plenary powers to rule that *Pleurocera acuta* Rafinesque, 1831 is the type-species of *Pleurocera* Rafinesque, 1818, and place those names on the appropriate Official Lists. At the same time, the name of the genus to which *P. verrucosa* Rafinesque is generally referred can also be placed on the Official List. This is *Lithasia* Haldeman, 1840, and its type-species, by monotypy, is *Anculosa* (*Lithasia*) *geniculata* Haldeman, 1840. The genus and species were established in *Monogr. Limniades or freshwater univalve shells N. Amer.*, Suppl.

17. The family-group names involved in this case can now be considered. First in order of priority is "Ancyloti" Troschel, 1857, *Gebiss der Schnecken*, vol. 1: 109. This is based on *Ancylotus* Herrmannsen, 1846, *Indicis Gen. Malac.* vol. 1: 52, which is an unjustified emendation of *Anculotus* Say, 1825, *Jl Acad. nat. Sci. Phila.*, vol. 5: 128. That name in turn appears to be either an unjustified emendation or an erroneous subsequent spelling of *Anculosa* Say, 1821, *Jl Acad. nat. Sci. Phila* vol. 2: 178. The type-species of *Anculosa* is *Melania praerosa* Say, 1821, loc. cit., by monotypy. However, "Ancyloti" has never been used, even in a corrected form, as a valid family-group name.

18. The next name is "Pachychili" Troschel, 1858, op. cit. vol. 3: 113, based on *Pachychilus* Lea, 1850. There is a subfamily name

PACHYCHILINAE in use, but it is not attributed to Troschel. Some authors attribute it to Crosse & Fischer, 1891, *Jl Conchyl.* vol. 39: 216, but they also used the spelling "Pachychili".

19. At this point a digression must be made to explain the confusion surrounding certain group names proposed by Troschel. In 1857 (: 95), after discussing J.E. Gray's classifications of gastropods based on the operculum and on the radula respectively, Troschel says (in translation): "I have studied and drawn a great number of opercula, in fact of most of the species of which I know the radula. I have found no definite correlation between them and therefore I cannot decide to adopt families based on differences in the operculum in this work. It is just as objectionable to base families on the characters of the radula, because I cannot get a general view of their significance even from my own fairly abundant material, and because in that way genera that have been classified far apart would be brought together and the classification would be overturned. There thus remains hardly any other course open to me than to go through the genera in small groups without wishing to maintain the rank of family for them." He then names eleven small groups. Regardless of his intention, each is based on the valid name of a contained genus, each is a noun in the nominative plural, and each clearly denotes a suprageneric taxon. They are therefore *de facto* available family-group names under the provisions of Art. 11e.

20. "Ancyloti" Troschel is surely a clear case for suppression under the plenary powers. Apart from its irregular formation, it has never been used and ought not to be allowed to threaten junior synonyms in general use. The case of "Pachychili" is different, however. If it is available under Art. 11e, then the valid name PACHYCHILINAE should be attributed to Troschel, 1858, not to Crosse & Fischer, 1891. It should not, however, be allowed to displace PLEUROCERIDAE and PALUDOMIDAE discussed in paragraph 22 below.

21. The next two names are CERAPHASIINAE Gill, Feb. 1863, *Proc. Acad. nat. Sci. Phila* vol. 15: 34, and STREPOMATIDAE Haldeman, September 1863, *ibid.*: 273-4. The first is based on a misspelling of *Ceriphasia* Swainson, 1840; it has never been brought into general use and should be suppressed. The second is based on a manuscript generic name of Rafinesque's which has never been made available; it is itself, therefore, not available.

22. The two valid family-group names whose stability ought to be reinforced by the ruling in the present case are PALUDOMINAE Gill, 1871, *Smiths. misc. Colls.* (227): 8 and PLEUROCERIDAE Fischer, 1885, *Manuel Conchyl.*: 705. If both names are entered on the Official List as they stand, PALUDOMIDAE will be the valid name for the family which includes the subfamilies PALUDOMINAE and PLEUROCERINAE. However, the Commission needs advice on two aspects of this part of the *Pleurocera* problem. The first aspect concerns the relationship between the two names. Is there a strong feeling that PLEUROCERIDAE ought to be given artificial precedence over PALUDOMIDAE at the same taxonomic level? The second concerns the

designation of the type-species of *Paludomus* Swainson, 1840, *Treatise Malac.:* 198, 340. The three originally included species were all first established by J.E. Gray in Griffith's edition of Cuvier's *Animal Kingdom,* Mollusca, etc., 1834: 598 - *Melania conica* [*non* Say, 1821], *Melania globulosa,* and *Melania retusa.* It is not known who first designated one of these species as type of *Paludomus*, nor in what circumstances. Information on this point would be welcomed.

23. In order to facilitate a rapid conclusion of the problems concerned with *Pleurocera* itself, the detailed proposals to the Commission are divided into two parts:

A. *Generic name problems*

The Commission is asked

(1) to use its plenary powers to set aside all designations of type-species for *Pleurocera* Rafinesque, 1818 hitherto made and, having done so, to designate *Pleurocera acuta* Rafinesque, 1831 to be the type-species of that genus;

(2) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Pleurocera* Rafinesque, 1818 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Pleurocera acuta* Rafinesque, 1831;
   (b) *Lithasia* Haldeman, 1840 (gender: feminine), type-species, by monotypy, *Anculosa* (*Lithasia*) *geniculata* Haldeman, 1840;

(3) to place the following specific names on the Official List of Specific Names in Zoology:
   (a) *acuta* Rafinesque, 1831, as published in the binomen *Pleurocera acuta* (specific name of type-species, by designation under the plenary powers in (1) above of *Pleurocera* Rafinesque, 1818);
   (b) *geniculata* Haldeman, 1840, as published in the combination *Anculosa* (*Lithasia*) *geniculata* (specific name of type-species, by monotypy, of *Lithasia* Haldeman, 1840).

B. *Family-group name problems*

No detailed proposals can be put forward here until the obscurities surrounding PACHYCHILINAE and PALUDOMIDAE have been clarified. The help of specialists with these is urgently requested.

SUPPLEMENTARY LIST OF PUBLICATIONS 1959-1975 IN WHICH *PLEUROCERA* IS USED AS THOUGH *P. ACUTA* WERE ITS TYPE.

BEETLE, D.E., 1973. A checklist of the land and freshwater mollusks of Virginia. *Sterkiana,* No 49: 21-35.

BICKEL, D., 1966. Ecology of *Corbicula manilensis* Philippi in the Ohio River at Louisville, Kentucky, *Sterkiana,* No. 23: 19-24.

BICKLE, D., 1967. Preliminary checklist of Recent and Pleistocene Mollusca of Kentucky. *Sterkiana*, No. 28: 7-20.

———— 1968. Checklist of the Mollusca of Tennessee. *Sterkiana*, No. 31: 15-39.

BRANSON, B.A., 1969. Snail records from various southern, eastern and middle states. *Sterkiana*, No. 35: 1-4.

CAMP, MARK J., 1973. Pleistocene lacustrine deposits and molluscan paleontology of western Ohio, eastern Indiana and southern Michigan. *Sterkiana*, No. 52: 1-27.

CLARK, ARMIN L., 1961. Pleistocene molluscan faunas of the Castalia Deposit, Erie County, Ohio. *Sterkiana*, No. 3: 19-39.

DAZO, B.C., 1965. The morphology and natural history of *Pleurocera acuta* and *Goniobasis livescens* (Gastropoda: Cerithiacea: Pleuroceridae). *Malacologia*, vol. 3: 1-80, 7 pls., 11 figs.

DEXTER, R.W., 1961. Changes in the gastropod population in the Salt Fork of the Big Vermilion River in Illinois, 1918-1959. *Sterkiana*, No. 3: 15-18.

FRANC, A., 1968. *in* Pierre P. Grassé, *Traité de Zoologie*, vol. 5 (3): Gastropoda: 1-893, Masson et Cie., Paris.

HARMAN, W.N., 1968. Replacement of *Pleurocerids* by *Bithynia* in polluted waters of Central New York. *Nautilus*, vol. 18 (3): 77-83.

———— and BERG, C.O., 1970. Fresh-water mollusca of the Finger Lakes region of New York. *Ohio J. Sci.* vol. 70(3): 146-150.

———— 1971. The freshwater snails of central New York, with illustrated keys to the genera and species. *Search Agriculture*, Cornell University, Ithaca, N.Y., vol. 1 (4): 1-68.

HOUP, K.H., 1970. Population dynamics of *Pleurocera acuta* in a central Kentucky limestone stream. *Amer. Midl. Nat.*, vol. 83: 81-88, 3 tabs.

ISOM, BILLY G., 1973. Critique 'Proceedings of a Symposium on rare and endangered mollusks (Naiads) of the U.S., Columbus, Ohio 1971'. *Sterkiana*, No. 49: 18-20.

KLEMM, D.J. 1975. Studies on the feeding relationships of leeches (Annelida: Hirudinea) as natural associates of mollusks. *Sterkiana*, No. 58: 1-50; No. 59: 1-20.

LAROCQUE, A., 1959. Checklist of Ohio Pleistocene and living Mollusca. *Sterkiana*, No. 1: 23-49.

———— 1962. Checklist of the non-marine mollusca of Quebec. *Sterkiana*, No. 7: 23-44.

———— 1963. Late Cenozoic Non-Marine Molluscan Associations in Eastern North America. *Sterkiana*, No. 12: 15-60.

LEONARD, A.B., 1959. *Handbook of Gastropods in Kansas*. University of Kansas, Museum of Natural History, Miscellaneous Publication (20): 1-224.

MALEK, E.A., 1962. *Laboratory Guide and Notes for Medical Malacology*. Burgess Publishing Co., Minneapolis, iv + 154 pp.

———— & CHENG, T.C. 1974. *Medical and economic Malacology*. Academic Press, New York and London, x + 398 pp.

MELVILLE, R.V., 1960. Proposed further use of the Plenary Powers in the case of the generic name *Pleurocera* Rafinesque, 1818 (Class Gastropoda). *Bull. zool. Nomencl.* vol. 17: 170-174.

MILLS, H.B., STARRETT, W.C. and BELLROSE, F.C. 1967. Man's effect on the fish and wildlife of the Illinois River. *Biol. Notes nat. Hist. Surv. Div. St. Ill.* No 57: 1966-1-24, figs., tab.

MURPHY, JAMES L., 1971. Molluscan remains from four Archaeological Sites in North eastern Ohio. *Sterkiana*, No 43: 21-25.

———— 1972. The Eber Hyde Mollusk Collection. *Sterkiana*, No. 48: 1-3.

ROSEWATER, J., 1961. Preliminary observations on the nervous systems of some Pleuroceridae. *Amer. Malac. Union Ann. Rep. for 1961, Bull.* vol. 28: 10-11.

ROY, E.C., Jr. 1963. Checklist of Pleistocene and living mollusca of Wisconsin. *Sterkiana*, No. 10: 5-21.

SINCLAIR, R.M. 1969. The Pleurocerid fauna of the Tennessee River, Gastropoda: Prosobranchia. *Amer. Malac. Union Ann. Rep. for 1969, Bull.* vol. 36: 45-47.

SINCLAIR, R.M., 1970. The pleurocerid fauna of the Tennessee River. Gastropoda: Prosobranchia. *Rep. Amer. Malac. Union Pacif. Div. Bull.* vol.35: 1969: 45-47.

STANSBERY, D.H., 1970. Eastern Freshwater mollusks (1) The Mississippi and St. Lawrence River systems. *Malacologia* vol. 1 (1): 19-22.

———— and CLENCH, W.J. 1974. The Pleuroceridae and Unionidae of the North Fork Holston River above Saltville, Virginia. *Amer. Malac. Union. Bull. for 1973:* 33-36.

———— 1975. The Pleuroceridae and Unionidae of the Middle Fork Holston River in Virginia. *Amer. Malac. Union Bull. for 1974:* 51-54.

VAILLANCOURT, G. et DINGEMANN, M. 1972. Liste des gastéropodes du Fleuve Saint-Laurent, Region de Gentilly, *Sterkiana*, No. 48: 17-29.

VAN DER SCHALIE, H., 1973. The mollusks of the Duck River drainage in central Tennessee. *Sterkiana*, No. 52: 45-55.

Publication in which *Pleurocera* is used as though *P. verrucosa* were its type.

MORRISON, J.P.E., 1971. *Athearnia*, new name for a genus of Pleurocerid Snails. *Nautilus*, vol. 84(3): 110-111.

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE
FINANCIAL REPORT 1975

1975 has been a very difficult year for the Trust. While there was an increase in Income of £1579 there was an excess of Expenditure of £3637 and in addition there was a reduction in Reserves of £4447 so that the overall financial position is some £8000 worse than a year ago.

Steps have been taken to deal with the situation by a further increase in the Subscription to the *Bulletin* and by the adoption of a cheaper method of production.

In addition the *International Code* which has been out of print for some time has been reprinted and is selling well.

INTERNATIONAL TRUST FOR ZOOLOGICAL NOMENCLATURE

BALANCE SHEET AS AT 31st DECEMBER, 1975

1974				
		FIXED ASSETS		
		OFFICE EQUIPMENT		
		Book Value at 1st July, 1948 and Additions since at cost	1,285.52	
		Less: Equipment written off	674.10	
			611.42	
		Less: Accumulated Depreciation	377.57	
	260			233.85
		INVESTMENTS at cost		
14,354		£14,500 9% Treasury Loan Stock 1994	14,353.67	
		Proceeds of Sale	9,906.03	
		Loss Charged to General Reserve	£4,447.64	
		£5,000 City of Cambridge 7% 1978		
5,016		Redeemable Loan Stock (Market Value £4,150)	5,016.23	
	19,370			5,016.23
		CURRENT ASSETS		
294		Amounts due from Sales	905.08	
104		Income and other Taxes Recoverable	65.60	
235		Cash at Bank and in Hand	3,914.62	
	633			4,885.30
	20,263			10,135.38

		CURRENT LIABILITIES		
2,000		Short Term Loan	.00	
2,652		Sundry Creditors	1,809.09	
294		Subscriptions Received in Advance	1,098.28	
	4,946			2,907.37
	15,317			7,228.01
		REVENUE RESERVES		
		GENERAL RESERVE		
10,000		Balance at 31st December, 1974		10,000.00
—		*Less:* Loss on Realisation of Investment ..	4,447.64	
		Income and Expenditure Account		
2,660		Deficit (1974 Surplus)	976.51	
				5,424.15
				4,575.85
2,657		"OFFICIAL LIST" SUSPENSE ACCOUNT		2,652.16
	£*15,317*			£7,228.01

NOTE: The Stock of Publications has not been valued.

FRANCIS J. GRIFFIN) Members of the Comm-
C.W. WRIGHT) ittee of Management.

REPORT OF THE AUDITORS

In our opinion the above Balance Sheet and annexed Income and Expenditure Account give a true and fair view of the state of the Company's affairs as at the 31st December, 1975 and of the operating Deficit for the year ended on that date and comply with the Companies Acts, 1948 and 1967.

3, Great James Street, WC1N 3DH.
5th April, 1976

MORLEY, MILLSON & CO.
Chartered Accountants

INCOME AND EXPENDITURE ACCOUNT FOR THE YEAR TO 31st DECEMBER, 1975

1974 £	£		£	£
		SALES OF PUBLICATIONS		
196		International Code		360.43
3,696		Bulletin of Zoological Nomenclature		5,614.94
3,892				5,975.37
5		DONATIONS		25.90
1,655		INVESTMENT INCOME (gross)		1,002.50
23		BANK DEPOSIT INTEREST		150.21
5,575				7,153.98
		Less: ADMINISTRATION EXPENSES		
		Salaries and National Insurance		
3,704		Contributions	3,578.42	
1,042		Office Expenses	1,689.60	
60		Audit Fees	60.00	
4,806			5,328.02	
		Less: PROPORTION ALLOCATED TO		
50		"OFFICIAL LIST"	50.00	
4,756			5,278.02	
		PRINTING AND DISTRIBUTION OF		
3,767		PUBLICATIONS	5,486.98	
29		DEPRECIATION OF OFFICE EQUIPMENT	25.98	
	8,552			10,790.98

	EXCESS OF EXPENDITURE OVER INCOME	
2,977	FOR THE YEAR	3,637.00
5,637	BALANCE brought forward	2,660.49
	DEFICIT carried to BALANCE SHEET	
£2,660	(1974 SURPLUS)	£976.51

"OFFICIAL LIST" SUSPENSE ACCOUNT FOR THE YEAR TO 31st DECEMBER, 1975

2,659	BALANCE brought forward	2,656.63
48	SALES OF PUBLICATIONS	45.53
2,707		2,702.16
	Less: PROPORTION OF ADMINISTRATION	
50	EXPENSES	50.00
£2,657	BALANCE carried to BALANCE SHEET	£2,652.16

PROPOSED CONSERVATION OF THE FAMILY-GROUP NAME ERIOCOCCIDAE COCKERELL, 1899 (INSECTA, HOMOPTERA) AND THE DESIGNATION OF A TYPE-SPECIES FOR *ERIOCOCCUS* TARGIONI-TOZZETTI, 1868 UNDER THE PLENARY POWERS. Z.N.(S.)2140

By Douglass R. Miller (*Systematic Entomology Laboratory, IIBIII Agr. Res. Serv., U.S.D.A., Beltsville, Md.*) and D.J. Williams (*Commonwealth Institute of Entomology, London*)

1. The purpose of this application is to request the International Commission on Zoological Nomenclature (I.C.Z.N.) to use its Plenary Powers to insure continued usage of the family name ERIOCOCCIDAE Cockerell, 1899 and the generic name *Eriococcus* Targioni-Tozzetti, 1868. Should the Rules be strictly applied, *Eriococcus* would be removed from the group of genera traditionally placed in the ERIOCOCCIDAE, and the commonly used family-group name ERIOCOCCIDAE would have to be replaced by one based on one of the remaining nominal genera.

2. Numerous accounts in the literature indicate problems surrounding the usage of the names *Eriococcus* and ERIOCOCCIDAE (e.g. Ferris, 1955, pp. 69, 70, 1957, pp. 81, 82; Hoy, 1962, pp. 11-14; Miller and McKenzie, 1967, p. 480; Morrison and Morrison, 1966, pp. 1, 69; Williams, 1969, pp. 318, 325), but no application to the Commission has been made.

History of *Eriococcus*

3. Targioni-Tozzetti (1868, p. 726) described the genus *Eriococcus* but did not designate a type-species. He included five species previously described in *Coccus* Linnaeus by Fonscolombe (1834, pp. 204, 209, 216-218): *C. festucae, C. rorismarinis, C. buxi, C. crispus,* and *C. fimbriatus.* Because no detailed description of *Eriococcus* was given, Borchsenius (1948, p. 501) regarded *Eriococcus* Targioni-Tozzetti as a nomen nudum and attributed authorship to Signoret (1870, p. 283). Hoy (1962, p. 29) and Morrison and Morrison (1966, p. 69) correctly concluded that *Eriococcus* Targioni-Tozzetti was not a nomen nudum and was available according to Article 16 (a) (v) of the Code.

4. Signoret (1870, p. 283) in his treatment of *Eriococcus* stated that he was reserving that genus for *C. festucae* (..."*Eriococcus* Targioni, que nous réservons pour le *C. festucae* Fonscolombe" ...). Between 1870 and 1872 he apparently changed his mind, because he stated (1872, p. 429) that he was reserving *Eriococcus* for *C. buxi.* Although both of these "réservations" have been considered correct type-species designations (e.g. Lindinger, 1933, p. 78; Morrison and Morrison, 1966, p. 69), neither is valid according to Article 67(c) of the Code because they are not

designations in a "rigidly construed" sense. If Signoret's "réservations" were accepted as a method of type-designation, the type-species of *Eriococcus* would necessarily be *C. festucae*, the first "type reservation", which is now considered a member of the genus *Eriopeltis* Signoret, family COCCIDAE.

5. Signoret (1875, p. 34) described *Acanthococcus*. *A. aceris* Signoret, 1875 (p. 35) is the type-species by monotypy.

6. Maskell (1887, p. 95) considered *Acanthococcus* as a junior subjective synonym of *Eriococcus*. This synonymy was generally accepted until the work of Borchsenius (1948) (for details see paragraph 8).

7. Fernald (1903, p. 70) made the first valid type-species designation for *Eriococcus* when she gave *crispus* as the type. This was an unfortunate choice because the identity of *crispus* is unknown, although from the original description (Fonscolombe, 1834, p. 204 and fig. 3), it is apparent that *crispus* is not an eriococcid. Thus, if the Rules are strictly applied , *Eriococcus* Targioni-Tozzetti must be considered a nomen dubium until its type-species, *Coccus crispus*, is identified. Lindinger (1933, p. 78) believed that *crispus* was a junior synonym of the margarodid *Gueriniella serratulae* (Fabricius). However, because *serratulae* is found on *Cistus, Daucus, Erica,* and olive, and *crispus* was described from "copals ou figuiers d'Inde", which is probably *Opuntia ficus-indica*, it is unlikely that *serratulae* and *crispus* are the same.

8. The generally accepted type-species of *Eriococcus* has been *C. buxi* (e.g., Borchsenius, 1949, p. 322; Hoy, 1962, p. 28, 1963, p.62; Morrison and Morrison, 1966, p. 69), and this has further confused the nomenclatural position of the genus. Borchsenius (1948, p. 501) considered *Eriococcus* to be monotypic, containing only *buxi*, and transferred the remaining species, normally placed in *Eriococcus*, to *Acanthococcus*.

History of the family-group name ERIOCOCCIDAE

9. Signoret (1875, p. 16) described the family-group taxon *Acanthococcites* and included *Acanthococcus, Eriococcus,* and five other genera. He apparently considered Acanthococcites to be a latinized name, not a vernacular one, because he gave the name in italics. The family-group name ACANTHOCOCCIDAE was used with various suffixes from 1875 to 1897 (e.g., Ashmead, 1891, p. 95; Atkinson, 1886, p. 286; Fuller, 1897, p. 1345; Maskell, 1887, p. 47; 1891, p. 18; 1894, p. 45).

10. Cockerell (1899, p. 389) described the family-group taxon ERIOCOCCINI which included *Eriococcus* and several other genera; *Acanthococcus* was not mentioned and presumably was considered to be a junior synonym of *Eriococcus*, because the type-species of *Acanthococcus* (*aceris*) was included in *Eriococcus*. From 1899 to the present, the family-group name ERIOCOCCIDAE has gained wide acceptance. Even in situations where both *Eriococcus* and *Acanthococcus* are considered distinct genera (e.g., Borchsenius, 1948, p. 501; Danzig, 1964, p. 820 and some current authors), ERIOCOCCIDAE is mainly used instead of

ACANTHOCOCCIDAE. As evidence of the general usage of the family-group name ERIOCOCCIDAE, the following list of citations is given: Afifi, 1968, p. 167; Balachowsky, 1942, p. 42; Bazarov, 1963, p. 67; Boratynski, 1962, p. 55; Borchsenius, 1948, p. 501; Borchsenius and Danzig, 1966, p. 41; Danzig, 1964, p. 820; Danzig, 1975, pp. 63, 81; Ferris, 1957, p. 81; Green, 1922, p. 345; Hoy, 1962, p. 5, 1963, p. 5; Kosztarab, 1968, p. 12; Koteja, 1972, p. 569; Koteja and Zak-Ogaza, 1969, p. 362; Maxwell-Lefroy, 1909, p. 758; McDaniel, 1964, p. 101; McKenzie, 1964, p. 21; Miller, 1970, p. 157; Miller and McKenzie, 1967, p. 471.

11. All major studies of the family have used ERIOCOCCIDAE including "A catalogue of the ERIOCOCCIDAE of the world" (Hoy, 1963), "ERIOCOCCIDAE of New Zealand" (Hoy, 1962), "A review of the family Eriococcidae" (Ferris, 1957), "Morphology and taxonomy of the adult males of the families PSEUDOCOCCIDAE and ERIOCOCCIDAE" (Afifi, 1968), and "A systematic study of *Ovaticoccus* Kloet and its relatives, with a key to North American genera of ERIOCOCCIDAE" (Miller and McKenzie, 1967).

12. Use of the name ACANTHOCOCCIDAE in its various forms has been very limited since Cockerell first used ERIOCOCCINI. Hoy (1963, p. 22) listed only two such citations and to our knowledge ACANTHOCOCCIDAE has been used only by Koteja (1974a, p. 46; 1974b, p. 248) since Hoy's study. Hoy (1962, p. 14) stated that if *Eriococcus* and *Acanthococcus* are distinct genera as proposed by Borchsenius (1948), then the name ACANTHOCOCCIDAE by the Law of Priority might be used instead of ERIOCOCCIDAE. However, he did not accept Borchsenius' concepts and continued to use *Eriococcus* and ERIOCOCCIDAE in the traditional manner.

13. Williams (1969, p. 318) in his paper on family-group names of scale insects agreed with Hoy and suggested that the name ACANTHOCOCCIDAE be accepted depending on whether Borchsenius' (1948) concepts of *Eriococcus* and *Acanthococcus* are considered valid or not. Williams further pointed out that both family-group names Kermesites Signoret (1875, p. 15) and Dactylopites Signoret (1875, p. 305) in the past have been considered part of the ERIOCOCCIDAE and have priority. However, it is now established that both DACTYLOPIIDAE and KERMESIDAE are distinct from ERIOCOCCIDAE.

14. If the Rules are followed, the genus *Eriococcus* with its type-species *Coccus crispus*, would be removed from the taxon presently considered under the family-group name ERIOCOCCIDAE and would have to be discarded as it is currently understood. The seldom used family-group name ACANTHOCOCCIDAE would be used in place of ERIOCOCCIDAE. This situation would be extremely undesirable, because in the current systematic literature the family-group name ERIOCOCCIDAE is utilized by nearly all scale taxonomists. Although the generic name *Eriococcus* has somewhat varied usage, it is presently considered only as a member of the taxon generally recognized under the family-group name ERIOCOCCIDAE.

15. The taxon generally recognized as the family ERIOCOCCIDAE contains species of economic importance. Because of this, a large quantity

of economic literature has been generated utilizing the current concepts of this name. Strict application of the Rules would upset general usage of this important name.

16. Of the five species first included in *Eriococcus* by Targioni-Tozzetti, only *Coccus buxi* is a representative of the taxon generally placed in the family ERIOCOCCIDAE. *Coccus festucae* is now placed in the COCCIDAE, *C. rorismarinis* in the PSEUDOCOCCIDAE, *C. crispus* in the MARGARODIDAE (?) (not an eriococcid), and *C. fimbriatus* in the ASTEROLECANIIDAE. Because *C. buxi* is a common, well-known species in Europe and because it is the only eriococcid of the first five species originally included in *Eriococcus*, we here suggest that it be designated as the type-species of *Eriococcus*.

17. *Eriococcus buxi* is not congeneric with *Acanthococcus aceris* (type-species of *Acanthococcus*). If *Acanthococcus* is not treated as a junior synonym of *Eriococcus*, the family-group name ACANTHOCOCCIDAE (Acanthococcites) has priority over ERIOCOCCIDAE (ERIOCOCCINI). Because the family-group name ERIOCOCCIDAE is used instead of ACANTHOCOCCIDAE by all but one living coccidologist including workers from Egypt, England, France, India, New Zealand, Poland, Russia, United States, etc., and because all major works on the taxon for the past 50 or more years have used ERIOCOCCIDAE (rarely DACTYLOPIIDAE), we are here requesting that the Commission grant the generally used name ERIOCOCCIDAE precedence over ACANTHOCOCCIDAE.

18. In the interests of stability and universality of scale-insect nomenclature, we therefore ask the Commission:

(1) to use its plenary powers
   (a) to set aside all designations of type-species made prior to the ruling now requested for the nominal genus *Eriococcus* Targioni-Tozzetti, 1868, and, having done so, to designate the nominal species *Coccus buxi* Fonscolombe, 1834, as the type-species of that genus;
   (b) to rule that the family-group name ERIOCOCCINI Cockerell, 1899 (type-genus *Eriococcus* Targioni-Tozzetti, 1868) is to be given precedence over the family-group name ACANTHOCOCCIDAE (correction of "Acanthococcites") Signoret, 1875 (type-genus *Acanthococcus* Signoret, 1875) by any zoologist who believes that both names denote a single taxon at any given level in the family-group;
(2) to place the following names on the Official List of Generic Names in Zoology:
   (a) *Eriococcus* Targioni-Tozzetti, 1868 (gender: masculine), type-species, by designation under the plenary powers in (1) (a) above, *Coccus buxi* Fonscolombe, 1834;
   (b) *Acanthococcus* Signoret, 1875 (gender: masculine), type-species, by monotypy, *Acanthococcus aceris* Signoret, 1875;

(3) to place the following names on the Official List of Specific Names in Zoology:
   (a) *buxi* Fonscolombe, 1834, as published in the binomen *Coccus buxi* (specific name of type-species, by designation under the plenary powers in (1) (a) above, of *Eriococcus* Targioni-Tozzetti, 1868);
   (b) *aceris* Signoret, 1875, as published in the binomen *Acanthococcus aceris* (specific name of type-species, by monotypy, of *Acanthococcus* Signoret, 1875);

(4) to place the following names on the Official List of Family-Group Names in Zoology:
   (a) ERIOCOCCINI Cockerell, 1899 (type-genus *Eriococcus* Targioni-Tozzetti, 1868) with an endorsement that it is to be given precedence over ACANTHOCOCCIDAE Signoret, 1875 by any zoologist who believes that both names denote a single taxon at any given level in the family-group;
   (b) ACANTHOCOCCIDAE (correction of "Acanthococcites") Signoret, 1875 (type-genus *Acanthococcus* Signoret, 1875) with an endorsement that it is not to be given priority over ERIOCOCCINI Cockerell, 1899 by any zoologist who believes that both names denote a single taxon at any given level in the family-group.

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TANYSTROPHEUS H. VON MEYER, [1852] (REPTILIA): REVISED REQUEST FOR CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.)2084

By Rupert Wild (*Staatliches Museum für Naturkunde, Arsenalplatz 3, 7140 Ludwigsburg, Germany*)

The generic name *Tanystropheus* H. von Meyer, [1852] (for evidence of date, see W. Quenstedt, 1963) was first published in *Zur Fauna der Vorwelt,* zweite Abteilung: 42 in the description of some fossil bones from the Middle Trias which he recognized to be exceptionally elongate vertebrae. He says that G. zu Münster had taken them to be the limb-bones of an exceptionally long-legged saurian and had proposed the name *Macroscelosaurus* for them. Münster, who lived from 1776 to 1844, worked from 1806 mainly in Bavaria, where these bones come from; but the name *Macroscelosaurus* is not to be found in any of his known published works or in any relevant reference cited by von Freyberg, 1974 in his comprehensive geological bibliography of north-east Bavaria.

2. *Macroscelosaurus* (which does not preoccupy *Macroscelesaurus* Haughton, 1918, a Permian reptile from South Africa) was therefore first published as a synonym of *Tanystropheus* and must be dealt with under the provisions of Article 11d. The alternative possible view, that these two names, published simultaneously, should be dealt with under the first reviser principle (Art. 24a) is not supported by the evidence, since that provision must be based on the assumption that both names were valid for their author(s). It is plain that *Macroscelosaurus* was not valid ("nicht entlässig") for von Meyer.

3. *Tanystropheus* has been used almost exclusively as the valid name for the genus (of which the type-species, by monotypy, is *T. conspicuus* von Meyer, [1852]) and I append a list of ten references by more than five different authors in the last 50 years to establish an a priori case for its conservation under Arts. 23a-b and 79b. One author, however, (O. Kuhn, 1934: 118; 1966: 43; 1971: 11) has adopted *Macroscelosaurus*. The name is therefore available under Article 11d and can only be suppressed by the Commission using its plenary powers. Kuhn refers to *"Macroscelosaurus* Münster, 1834", but it has proved impossible to verify any such reference.

4. A further potential threat to the stability of *Tanystropheus* is presented by the generic name *Zanclodon* Plieninger, 1847. In 1847 Plieninger (: 152 ff., pl. 3, figs 3-8) described and illustrated a fragment of an upper jaw, some vertebrae, phalanges and dermal ossifications from the Lettenkeuper of Gaildorf / Württemberg as *Zanclodon laevis*. All of these specimens have been lost except the upper jaw-fragment, of which the teeth show that it cannot possibly belong to *Tanystropheus*. On the other hand,

two of the vertebrae *may* be of *Tanystropheus*. E. Fraas (1896: 18) pointed out that Plieninger's name had been misused shortly after its establishment by Quenstedt, whose great authority led to his usage being generally adopted. Fraas therefore proposed to leave usage undisturbed and renamed Plieninger's species *Zanclodon plieningeri*. He based this name — which is a junior objective synonym of *Zanclodon laevis* Plieninger — on the description of the upper jaw fragment alone, but did not expressly designate it as the type-specimen either of *Z. laevis* or of *Z. plieningeri*. Moreover, he did not refer Plieninger's other syntypes to any other species than that in which they had been described, so that he must be assumed to have understood Plieninger's concept in its original sense. To prevent any further confusion, as well as to safeguard *Tanystropheus*, I now designate as lectotype of *Zanclodon laevis* Plieninger, 1847, the fragment of upper jaw figured by Plieninger and housed in the Staatliches Museum für Naturkunde in Stuttgart, Ludwigsburg.

5. I therefore ask the Commission

(a) to use its plenary powers to suppress the generic name *Macroscelosaurus* H. von Meyer, [1852] for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) to place the generic name *Tanystropheus* H. von Meyer [1852] (gender: masculine), type-species, by monotypy, *Tanystropheus conspicuus* H. von Meyer, [1852], on the Official List of Generic Names in Zoology;

(c) to place the specific name *conspicuus* H. von Meyer, [1852], as published in the binomen *Tanystropheus conspicuus* (specific name of type-species of the nominal genus *Tanystropheus*), on the Official List of Specific Names in Zoology;

(d) to place the generic name *Macroscelosaurus* H. von Meyer, [1852], as suppressed under the plenary powers in (a) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

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APPLICATION FOR THE SUPPRESSION OF THE NAME *SMINTHOPSIS MURINA* VAR. *CONSTRICTA* SPENCER, 1896 (MARSUPIALIA, DASYURIDAE). Z.N.(S.)2080

By M. Archer (*Queensland Museum, Brisbane, Queensland, Australia*)

The name *Sminthopsis murina* var. *constricta* Spencer, 1896 was published in connection with a specimen of a small carnivorous marsupial collected at Oodnadatta, Northern Territory. The name has only been used twice (see 5 below) for a taxon but no material has been allocated to it except that assigned by its original author; its status has been discussed in the literature by Dixon (1970) and it has been listed in faunal lists by Iredale & Troughton (1934), Parker (1973), Tate (1947), Finlayson (1961) and Troughton (1965). In the last 50 years only Tate (1947) regarded the name as valid. He did not allocate any specimens to this taxon, indicated uncertainty in its application, and noted that he had not examined the type-specimen.

2. The type-specimen was neither nominated nor figured by Spencer (loc. cit.) in the type description.

3. The type-specimen is not known with certainty to exist, although there has been a suggestion by Dixon (loc. cit.) that a specimen C 6920 in the National Museum of Victoria may be the holotype despite the fact that the measurements and sex disagree with those published by the original author.

4. C 6920 is an undoubted specimen of the species *Sminthopsis crassicaudata* (Gould, 1844) and which would, if assigned to subspecies, be a specimen of the taxon which is currently called *Sminthopsis crassicaudata centralis* Thomas, 1902, by those who recognize that subspecies. The name *centralis* has been used by Jones (1923), Finlayson (1933), Iredale & Troughton (1934), Tate (1947), and Troughton (1965). Tate (1947, p. 122) anticipates the possibility that *Sminthopsis murina* var. *constricta* may equal *centralis*.

5. If specimen C 6920 is not the holotype (and I do not think it is), on geographical grounds it is possible that the name *Sminthopsis murina* var. *constricta* refers to the taxon which is recognized by me, in my current revision (accepted for publication by *Bull. Amer. Mus. Nat. Hist.*) of *Sminthopsis*, as *Sminthopsis ooldea* Troughton, 1965. This possibility is suggested also by Parker (1973). The name *ooldea* has been used by Troughton (1965 and 1967), Parker (1973), and Archer (1975a, b, 1976a, b). The name *ooldea* is also involved in numerous publications by other authors in press, a consequence of the recent discovery of this form in many areas of central Australia.

6. Instability which results from the present situation can be removed by one of the alternative actions of either selecting a neotype for

Sminthopsis murina var. *constricta* or by suppressing it. The former alternative would, depending upon the nature of the specimen selected, either upset an established name (i.e. *centralis*) in favour of this name which has never been allocated to a taxon except by its original author, as a variety of *murina*, and by Tate (1947, but without additional material) as a variety of *macroura*, or the name *ooldea* which has both an adequate type-specimen and type-locality. The latter alternative would maintain existing usage.

7. I hereby apply to the Internatonal Commision on Zoological Nomenclature to use its plenary powers to suppress the name *Sminthopsis murina* var. *constricta* Spencer, 1896, for the purposes of the Law of Priority but not for those of the Law of Homonymy, and to place it on the Official Index of Rejected and Invalid Specific Names in Zoology.

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CONTENTS

(*continued from front wrapper*)

Page

International Trust for Zoological Nomenclature
Financial Report and Accounts for 1974 93
Financial Report and Accounts for 1975 113

NEW AND REVIVED CASES

ELAPIDAE (Reptilia: Serpentes): request for suppression and validation of names (H.M. Smith & R.B. Smith) 73
Family-group name of the Leaf-Eating Monkeys (Mammalia, Primates): proposal to give COLOBIDAE Blyth, 1875, precedence over SEMNOPITHECIDAE Owen, 1843, and PRESBYTINA Gray, 1825. (E. Delson) 85
Xiphiurus Smith, 1847: Proposed suppression in favour of *Genypterus* Philippi, 1857 (Pisces, OPHIDIIDAE). (C. Richard Robins & R.N. Lea) 90

CONTENTS

(*continued from inside back wrapper*)

Page

Should Microform Methods be Accepted as Valid Methods of Publication under the Code? (R.V. Melville) 98

Pleurocera Rafinesque, 1818 (Gastropoda): proposed designation of type-species under the plenary powers. (R.V. Melville) 105

ERIOCOCCIDAE Cockerell, 1899 (Insecta, Homoptera) proposed conservation of the family-group name ERIOCOCCIDAE Cockerell, 1899 (Insecta, Homoptera): *Eriococcus* Targioni-Tozzetti, 1868: proposed designation of type-species under the plenary powers (D.R. Miller & D.J. Williams) 118

Tanystropheus H. von Meyer [1852] (Reptilia): revised request for conservation under the plenary powers. (R. Wild) 124

Sminthopsis murina var. *constricta* Spencer, 1896 (Marsupialia, DASYURIDAE): application for the suppression of the name. (M. Archer) 127

Comments

Euplilis Risso, 1826 (Hymenoptera, SPHECIDAE: Comment on proposed suppression in favor of *Rhopalum* Stephens, 1829 (R.M. Bohart & A.S. Menke) 68

Heterodera A. Schmidt, 1871 (Nematoda): comment on application for a ruling on the availability of five specific names proposed as new genus in a "preliminary key to British Species of *Heterodera*" (R.M. Jeffords) 69

Rhiniodon Smith, 1828 (Pisces): comment on proposed suppression in favour of *Rhincodon* Smith, 1829 (C.L. Hubbs, L.J.V. Compagno & W.I. Follett) 70

Notozus Förster, 1853 (Insecta, Hymenoptera: CHRYSIDIDAE): comments on proposed addition to the Official List of Generic Names (W.J. Pulawski & R.M. Bohart) 71

Halecium Oken, 1815 (Coelenterata: Hydroida): comment on proposed validation: and suppression of *Thoa* Lamouroux, 1816 (Hydroida) (H. Lemche; reply by P. Cornelius) 72

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CONTENTS

Page

Notices prescribed by the International Congress of Zoology:
Date of commencement by the International Commission on Zoological Nomenclature of voting on application published in the *Bulletin of Zoological Nomenclature* 129
Notice of the possible use by the International Commission on Zoological Nomenclature of its plenary powers in certain cases . 129
List of new applications 130
Special announcements 132

continued

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CONTENTS continued

Obituary: Hilbrand Boschma 134

Minutes of general meeting of the International Commission on Zoological Nomenclature at the XIX General Assembly of IUBS, Bangalore, India, from 27th September to 2nd October 1976 185

Opinions

Opinion 1065. *Polyzonium germanicum* Brandt, 1837, conserved: *Platyulus audouinii* Gervais, 1836, suppressed (Diplopoda, POLYZONIIDAE) 151

Opinion 1066. *Lyda alternans* Costa, 1859, given precedence over *Lyda inanis* Klug, 1808 (Insecta: Coleoptera) 155

Opinion 1067. Suppression of *Delphinus pernettensis* de Blainville, 1817 and *Delphinus pernettyi* Desmarest, 1820 (Mammalia: Cetacea) 157

Opinion 1068. LEPTOSOMATIDAE in Aves and Nematoda: resolution of homonyny arising from similarity in the names of the type genera 159

Opinion 1069. Correction of entry in Official List of Family-Group names in Zoology for Name Number 428 (THRAUPIDAE) 162

Opinion 1070. Conservation of *Archaeopteryx lithographica* von Meyer, 1861 (Aves) 165

Opinion 1071. Emendation under the plenary powers of LIOPELMATINA to LEIOPELMATIDAE (Amphibia, Salientia) 167

Opinion 1072. Refusal of request to suppress *Hyla crucialis* Harlan, 1826 (Amphibia) 170

Opinion 1073. Validation of RIODINIDAE Grote, 1895 (1827) (Lepidoptera) 172

Opinion 1074. *Murex rana bubo* Linnaeus, 1758, designated as type-species of *Tutufa* Jousseaume, 1881 (Gastropoda) 174

Opinion 1075. Conservation of *Striglina* Guenée, 1877 (Lepidoptera, THYRIDIDAE) 176

Opinion 1076. Refusal of application for use of the plenary powers to suppress *Procyon brachyurus* Wiegmann, 1837 and *Procyon obscurus* Wiegmann, 1837 (Mammalia, Carnivora) 179

Opinion 1077. Refusal of request to use the plenary powers to suppress the generic name *Cynocephalus* Boddaert, 1768 (Mammalia) 182

New and revived cases

Amendments to an application for the designation of a type-species under the plenary powers for *Drupella* Thiele, 1925 (Gastropoda). By W.O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*) 190

Cotyle Boie, 1826 (Aves, HIRUNDINIDAE): request for suppression. By R.K. Brooke (*Durban Museum, Smith Street, Durban 4001, RSA*) 192

Request for the conservation of *Rana sphenocephala* Cope, 1886, and the suppression of *Rana utricularius* Harlan, 1826 and *Rana virescens* Cope, 1889 (Amphibia: Salientia). By L.E. Brown and R.S. Funk (*Department of Biological Sciences, Illinois State University, Normal, Illinois, U.S.A.*); and Hobart M. Smith (*Department of Environmental, Population and Organismic Biology, University of Colorado, Boulder, Colorado, U.S.A.*) 195

Leptotyphlops and *Ramphotyphlops* Fitzinger, 1843 (Reptilla, Serpentes): proposed conservation under the plenary powers. By A.F. Stimson (*British Museum (Natural History), London, S.W.7*); J. Robb (*Department of Zoology, University of Auckland, New Zealand*) and G. Underwood (*Department of Biological Sciences, City of London Polytechnic*) 204

The type-species of *Goniurellia* Hendel, 1927 (Insecta: Diptera: TEPHRITIDAE): by A. Freidberg and J. Kugler (*Department of Zoology, The George S. Wise Center for Life Sciences, Tel Aviv University, Israel*) 208

ACYONIDAE Ameghino, 1889 (Mammalia): proposed suppression under the plenary powers. By Larry G. Marshall and W.A. Clemens (*Department of Paleontology, University of California, Berkeley*), R.J. Hoffstetter (*Institut de Paléontologie, Muséum National d'Histoire Naturelle, Paris, France*), Rosendo Pascual (*Facultad de Ciencias Naturales y Museo de La Plata, La Plata, Argentina*), Bryan Patterson (*Museum of Comparative Zoology, Harvard University, Cambridge*), Richard H. Tedford (*Department of Vertebrate Paleontology, American Museum of Natural History, New York*) and W.D. Turnbull (*Field Museum of Natural History, Chicago*) 212

Psammophis moniliger var. *bilineatus* Peters, 1867 (Reptilia: COLUBRIDAE): proposed suppression under the plenary powers in favour of *P. sibilans subtaeniata* Peters, 1882. By D.G. Broadley (*Umtali Museum, Umtali, Rhodesia*) 214

Philodryas nattereri Steindachner, 1870 (Reptilia: Serpentes): proposed conservation. By R.A. Thomas (*Department of Biology, Texas A & M University, College Station, Texas 77843*) 216

The status of *Siphonophora* Fischer,1823 (Bryozoa) and the validity of *Siphonophora* Brandt, 1837 (Diplopoda, POLYZONIIDA). By C.A.W. Jeekel (*Institute of Taxonomic Zoology* (*Zoological Museum*), *University of Amersterdam, The Netherlands*) 218

Pieris castoria Reakirt, 1867 (Insecta, Lepidoptera): proposed suppression under the plenary powers. By A.M. Shapiro (*Departments of Zoology and Entomology, University of California, Davis, California 95616 U.S.A.*) 221

Culex loewi Glebel, 1862(Insecta: Diptera: CULICIDAE): request for suppression under the plenary powers so as to conserve *Toxorhynchites brevipalpis* Theobald, 1901 (Official List of generic names No. 1341; Official List of Specific Names No. 1615) By G.B. White (*Department of Entomology, British Museum* (*Natural History*), *London, SW7 5BD*) 228

Stromatoporella Nicholson, 1886 (Fossil Order Stromatoporoidea): Problem of the type-specimen of the type-species, *Stromatoporella granulata* (Nicholson, 1873). By Joseph St. Jean, Jn. (*Department of Geology, University of North Carolina, Chapel Hill, North Carolina, 27514, U.S.A.*) 233

Revised proposals concerning the validation of *Ditylenchus* Filipjev, 1936 (Nematoda). By the Secretary, International Commission on Zoological Nomenclature 241

Request that the International Commission rule to suppress Fowler's lectotype designation of *Alburnops plumbeolus* Cope, 1865 and *Hypsilepis cornutus cerasinus* Cope, 1868. By C.R. Gilbert (*The Florida State Museum, University of Florida, Gainesville, Florida 32611, U.S.A.*) 245

Chlorophis carinatus Andersson, 1901, proposed nomenclatural precedence over *Philothamnus nigrofasciatus* Buchholz and Peters, 1875, its senior subjective synonym. (Reptilia: COLUBRIDAE). By Barry Hughes (*University of Ghana, Legon, Ghana*) 248

Calymene variolaris Brongniart, 1822 (Trilobita): proposed use of the plenary powers to designate a neotype in harmony with current use. By R.P. Tripp (*British Museum* (*Natural History*), *London*) J.T. Temple (*Birkbeck College, London*) and K.C. Gass (*Milwaukee, U.S.A.*) 250

Proposed direction to amend the date of *Entomostracites punctatus* Wahlenberg (Trilobita) from 1821 to [1818] (Official List of Specific Names in Zoology No. 1595). By the Secretary, International Commission on Zoological Nomenclature 253

Comments

Comment: *Pan* and *Panthera* of Oken's Lehrbuch? By P. Hershkovitz (*Field Museum of Natural History, Chicago, Illinois 60605*), and reply to P. Hershkovitz by G.B. Corbet, J.E. Hill, J.M. Ingles and P.H. Napier (*British Museum (Natural History), Cromwell Road, London SW7 5DB*) 135

Comments on *Giraffa camelopardalis australis* Rhoads, 1896 (Mammalia). By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*) and A.I. Dagg (*University of Waterloo, Ontario, Canada N2L 3G1*) 136

Comments on a Challenge to the family name ATTACIDAE (Insecta: Lepidoptera). By I.W.B. Nye, D.S. Fletcher and A. Watson (*British Museum (Natural History), London SW7 5DB*) and C. Lemaire (*c/o Laboratoire d'Entomologie, Muséum national d'Histoire naturelle, 45 rue de Buffon, 75005, Paris*) 137

Comments on the revised application for a ruling on the stem of the Family-group name based on the type-genus *Petromyzon* Linnaeus, 1758. By W.I. Follett and L.J. Dempster (*California Academy of Sciences, San Francisco, California 94118, U.S.A.*) and C. Richard Robins (*Chairman, Committee on Names of Fishes, American Fisheries Society and American Society of Ichthyologists and Herpetologists; Maytag Professor of Ichthyology, School of Marine and Atmospheric Science, University of Miami*) 142

Comments on CIRCINAE Sundevall, 1836 (Aves) versus CIRCINAE Dall, 1895 (Mollusca). By E. Elsenmann (*American Museum of Natural History, New York, N.Y. 10024, U.S.A.*); G.N. Kashin (*Propect Vernadskogo No. 61, app. 53, Moscow 117415, U.S.S.R.*), R.K. Brooke (*P.O. Box 1690, Salisbury, Rhodesia*): reply by Dr. B. Roth (*California Academy of Sciences, San Francisco, California 94118, U.S.A.*) to K.M. Brooke; comment by D. Heppell (*Royal Scottish Museum, Edinburgh EH1 1JF, Scotland*) 143

Comment on proposed suppression of *Parnalius* Rafinesque, 1815 in favour of *Zerynthia* Ochsenhelmer, 1816. By O. Kudrna (*Portsmouth Polytechnic, Portsmouth, England*), P.R. Ackery, N.D. Riley and L.G. Higgins (*British Museum (Natural History), London SW7 5BD*) 145

Comments on the proposed designations fo type-species for *Eriophyes* Siebold, 1851 and *Phytoptus* Dujardin, 1851 (Acarina: Eriophyoidea). By E.E. Lindquist (*Biosystematics Research Institute, Agriculture Research Branch, Ottawa, Ontario, K1A OC6, Canada*); D.C.M. Manson (*Department of Agriculture, Plant Health and Diagnostic Station, P.O. Box 241, Levin, New Zealand*); M.K.P. Smith Meyer (*Plant Protection Research Institute, Pretoria, South Africa*) and G.W. Ramsay (*Department of Scientific and Industrial Research, Entomology Division, Mt. Albert Research Centre, Auckland, New Zealand*) 146

Comments on the request to determine the generic names of the Baboon and the Mandrill. By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*); E. Delson and P.H. Napier; J. Meester (*University of Natal, Pietermaritzburg, Natal South Africa*); and R.H.N. Smithers (*Associate Curator of Mammals, Queen Victoria Museum, Causeway, Rhodesia*) 148

Comments on the revived application concerning *Tipula oleracea* Linnaeus, 1758 by L.B. Holthuis and the Secretary, International Commission on Zoological Nomenclature 150

BULLETIN OF ZOOLOGICAL NOMENCLATURE

Volume 33, parts 3/4 (pp. 129-254) 31st March, 1977

NOTICES

(a) *Date of Commencement of Voting* - In normal circumstances the Commission may start to vote on applications published in the *Bulletin of Zoological Nomenclature* six months after the publication of each application. Any zoologist who wishes to comment on any of the applications in the present part is invited to send his contribution, in duplicate, to the Secretariat of the Commission as quickly as possible, and in any case in time to reach the Secretariat before the close of the six-month period.

(b) *Possible use of the plenary powers* - The possible use by the Commission of its plenary powers is involved in the following applications published in the present part of the *Bulletin* [those marked with an asterisk involve the application of Articles 23a-b and 79b]:

(1) *Drupella Thiele,* 1925 (Gastropoda): designation of type-species. Z.N.(S.) 1891.

(2) *Ditylenchus* Filipjev, 1936 (Nematoda): revised proposals concerning validation. Z.N.(S.) 1955.

*(3) *Cotyle Boie,* 1826 (Aves, HIRUNDINIDAE): request for suppression. Z.N.(S.) 2117.

*(4) *Rana sphenocephala* Cope, 1886, request for conservation of; *Rana utricularius* Harlan, 1826 and *Rana virescens* Cope, 1889, request for suppression of (Amphibia Salientia). Z.N.(S.) 2141.

*(5) *Alburnops plumbeolus* Cope, 1865 and *Hypsilepis cornutus cerasinus* Cope, 1868: request to suppress Fowler's lectotype designations. Z.N.(S.) 2154.

(6) *Leptotyphlops* and *Ramphotyphlops* Fitzinger, 1843 (Reptilia; Serpentes): proposed conservation. Z.N.(S.) 2155.

(7) *Goniurellia* Hendel, 1927 (Insecta, Diptera, TEPHRITIDAE): designation of type-species. Z.N.(S.) 2157.

*(8) ACYONIDAE Ameghino, 1889 (Mammalia): proposed suppression. Z.N.(S.) 2159.

*(9) *Psammophis moniliger* var. *bilineatus* Peters, 1867: proposed suppression in favour of *P. sibilans subtaeniata* Peters, 1882 (Reptilia, COLUBRIDAE). Z.N.(S.) 2165.

*(10) *Philodryas nattereri* Steindachner, 1870 (Reptilia, Serpentes): proposed conservation. Z.N.(S.) 2166.

*(11) *Siphonophora* Fischer, 1823 (Bryozoa), status of: *Siphonophora* Brandt, 1837 (Diplopoda, Polyzoniida), validation of. Z.N.(S.) 2168.

(12) *Pieris castoria* Reakirt, 1867 (Insecta, LEPIDOPTERA): proposed suppression. Z.N.(S.) 2170.

*(13) *Culex loewi* Giebel, 1862 (Insecta, Diptera, CULCIDAE): request for suppression so as to conserve *Toxorhynchites brevipalpis* Theobald, 1901. Z.N.(S.) 2173.

*(14) *Chlorophis carinatus* Andersson, 1901; proposed nomenclatural precedence over *Philothamnus nigrofasciatus* Bucholz and Peters, 1875. Reptilia; COLUBRIDAE Z.N.(S.) 2174.

(15) *Stromatoporella* Nicholson, 1886 (Fossil order Stromatoporoidea): problem of the type-specimen of the type-species, *Stromatoporella granulata* (Nicholson), 1873. Z.N.(S.) 2177.

(16) *Calymene variolaris* Brongniart, 1822 (Trilobita): proposed designation of a neotype. Z.N.(S.) 2189.

(c) The following new applications have been received since the publication of vol. 33(2) on 30th September 1976. Those marked with an asterisk involve the application of Articles 23a-b and 79b.

(1) *Pharostoma* Rouault, 1847, and *Prionocheilus* Hawle and Corda, 1847 (Trilobita): proposed regulation. Z.N.(S.) 2191 (D.J. Siveter).

(2) *Haliplanella* Treadwell, 1943 (Polychaeta), proposed suppression in favour of *Haliplaneila* Hand, 1955 (Anthozoa). Z.N.(S.) 2192 (D. Fautin Dunn and C.Hand).

(3) *Campylosteira* Fieber, 1844 (Hemiptera, TINGIDAE): designation of type-species. Z.N.(S.) 2193 (J. Péricart).

(4) *Baeocera* Erichson, 1845 (Coleoptera, SCAPHIDIIDAE): designation of type-species. Z.N.(S.) 2194 (I. Löbl).

*(5) *Simia syndactyla* Raffles, 1821 (Mammalia, HYLOBATIDAE): proposal to give precedence over *Simia gibbon* C. Miller, 1779. Z.N.(S.) 2195 (C.P. Groves).

(6) *Alytus* Hampe, 1863 (Insecta: Coleoptera, PSELAPHIDAE): proposed suppression under the plenary powers in favour of *Batrisodes* Reitter, 1881 and *Alytus* Jacoby, 1887. Z.N.(S.) 2196 (C. Besuchet).

(7) *Davila consanguineus* Distant, 1893: request to designate as type-species of *Peggichisme* Kirkaldy, 1904 (Hemiptera, LYGAEIDAE) Z.N.(S.) 2197 (M.H. Sweet).

(8) *Loxoconcha tumida* Brady, 1869 (Crustacea, OSTRACODA): proposal to validate. Z.N.(S.) 2198 (J. Athersuch).

(9) *Mycteromyia* Philippi, 1865 (Insecta, Diptera, TABANIDAE): request for designation of type-species. Z.N.(S.) 2199 (C.B. Philip).

*(10) *Lopus longirostris* Jordan, 1947 (Insecta, Heteroptera, MIRIDAE): proposed conservation. Z.N.(S.) 2200 (I.M. Kerzhner).

(11) MORPHIDAE Boisduval, 1836 (Insecta, Lepidoptera): request for revision of Official List. Z.N.(S.) 2201 (C.F. Cowan).

*(12) *Pectinaria* Lamarck, 1818, *Nereis cylindraria belgica* Pallas, 1766 and *Lagis koreni* Malmgren 1866 (Polychaeta): proposed conservation. Z.N.(S.) 2202 (C. Nielsen).

(13) *Dipetalonema, viteae*, Krepkogorskaya, 1933 (Nematoda, ONCHOCERCIDAE): proposed determination of correct spelling. Z.N.(S.(2203 (O. Bain, A. Chabaud, B.Duke, R. Kouznetzov, R. Muller, P. Wenk).

*(14) *Tinea, bjerkandrella,* Thunberg, 1784 and *Phalaena* (*Noctua*) *cardui* Hübner, 1790 (Insecta, Lepidoptera): proposed conservation. Z.N.(S.) 2204 (I.W.B. Nye, O. Karsholt, E.S. Nielsen).

(15) *Entomostracites punctatus* Wahlenberg (Trilobita): proposed Direction to amend date from 1821 to 1818 on Official List of Specific Names in Zoology No. 1595. Z.N.(S.) 2205 (Secretary).

(16) HENICOPIDAE Pocock, 1901 (Myriapoda, Chilopoda): proposed conservation. Z.N.(S.) 2206 (M. Würmli).

c/o British Museum (Natural History)
Cromwell Road
LONDON SW7 5BD, U.K.
November 1976

R.V.MELVILLE
Secretary
International Commission on Zoological Nomenclature

SPECIAL ANNOUNCEMENTS.

A. ELECTION OF MEMBERS OF THE COMMISSION.

At the XIX General Assembly of IUBS at Bangalore, 27 September - 2 October 1976, the Division of Zoology, acting as successor in authority to the International Congress of Zoology, re-elected Dr. Ride, Dr. Sabrosky, Dr. Kraus and Dr. Mayr and elected Dr. H.G. Cogger a new member of the Commission. Dr. G.G. Simpson was not nominated for re-election.

Dr. Harold Cogger is aged 41. He has been Head of the Department of Herpetology at the Australian Museum, Sydney, since 1961. His main fields of research are in various aspects of the biology of the reptiles and amphibians of Australia and the western Pacific region, and in the application of computers to biological and bibliographical problems.

B. RESIGNATION OF MEMBERS OF THE COMMISSION.

Dr. Ernst Mayr (Commissioner-at-large) and Prof. Dr. H.K. Erben (Germany) have resigned from the Commission.

C. ANNOUNCEMENT OF VACANCIES.

Two vacancies exist in the International Commission on Zoological Nomenclature owing to resignations. Nominations for candidates for election to the vacancies should be sent to the Secretary, International Commission on Zoological Nomenclature, c/o British Museum (Natural History), Cromwell Road, London SW7 5BD, United Kingdom, within three months of the date of publication of this notice in the *Bulletin of Zoological Nomenclature*. Candidates must be eminent scientists, irrespective of nationality, with a distinguished record in any branch of zoology, who are known to have an interest in zoological nomenclature.

Nominations must state the name, date of birth, nationality, field(s) of specialisation and qualifications of each candidate, and the name(s) and status of the nominator(s). A list of the candidate's publications and his *curriculum vitae* would also be helpful.

D. DR. I.W.B. NYE

The Director of the British Museum (Natural History), Dr. R. Hedley, and the Keeper of Entomology, Dr. Paul Freeman, have kindly agreed that Dr. I.W.B. Nye may devote a part of his official time to work as Assistant Secretary to the Commission. The Commission is most grateful for his help

c/o British Museum (Natural History),
Cromwell Road,
London, SW7 5BD,
United Kingdom.

R.V. MELVILLE,
Secretary, International
Commission on Zoological
Nomenclature.

November, 1976.

OBITUARY: HILBRAND BOSCHMA

The Commission announces, with great regret, the death of Dr. Hilbrand Boschma on 22 July 1976 at the age of 83.

Dr. Boschma was born at IJsbrechtum in Friesland in 1893. He took his degrees at the University of Amsterdam and gained an early reputation for his researches on parasitic Copepoda (Rhizocephala) and corals. In later years he developed from a comparative anatomist to an all-round biologist of exceptional breadth of expertise and activity.

In 1934, at the early age of 41, he became Director of the Rijksmuseum at Leiden and Professor of systematic zoology at Leiden University. His ability as an administrator is shown by the fact that, even in the great depression, he increased the financial resources and the staff of the Museum; and by his success in keeping all his staff out of German hands during the years of occupation. He retired as Director in 1958 and as Professor in 1963, but maintained his scientific activity to the end of his life.

Dr. Boschma was elected a member of the Commission in 1946 and retired on reaching the age-limit in 1968. He attended the Paris (1948), Copenhagen (1953) and London (1958) Congresses of Zoology and took an active part in the Colloquia on nomenclature at Copenhagen and London. Apart from his work on the Commission he worked hard to interest his students in nomenclature and published several papers on nomenclature problems. Towards the end of his life his health began to fail and he suffered a fractured hip and arm a few days before his death, but passed peacefully away without pain.

L.B.H.

COMMENT: *PAN* AND *PANTHERA* OR OKEN'S *LEHRBUCH*? Z.N.(S.) 482
(see vol. 31: 29)

by Philip Hershkovitz (*Field Museum of Natural History, Chicago, Illinois 60605*)

In their resubmittal of the application of Morrison-Scott (1965, *Bull. zool. Nomencl.* vol. 22 (4): 230) for conservation of "Pan Oken" and "Panthera Oken", Corbet, Hill, Ingles and Napier supply the previously omitted page references to Oken's *Lehrbuch der Naturgeschichte*, volume 3, part 2. Those given are 1030 for the term "Pan", and 1052 for the term "Panthera". The type species of "Pan" in the Morrison-Scott proposal is "*Simia troglodytes* Blumenbach, 1779 (The Chimpanzee)", and that of "Panthera" is "*Felis pardus* Linnaeus, 1758 (The Leopard)".

With regard to "Panthera", the pertinent information on page 1052 of the *Lehrbuch* appears as follows:

"1. Art. *Panthera, F. colocolo;* [description follows]".

It is evident here and from the text in general that *Panthera* is a uninominal Latin vernacular name for a species of cat. The only generic name used in the excerpt is *Felis* (by inference) in the binomial "*F. colocolo*" without author or bibliographic reference. Were *Panthera* admitted as a generic name, its type species, by monotypy, would be *Felis colocolo*, presumably the small Chilean felid described by Molina in 1782 (*Sagg. Stor. Nat. Chili*: 295). Validation of "Panthera Oken, 1816", from page 1052 would, therefore, only defeat the efforts of those who strive to conserve the name for the greater cats alone.

The Morrison-Scott proposal, however, calls for the designation of *Felis pardus* Linnaeus, 1758, as type species of *Panthera* cited from Oken, 1816. This specific name appears on page 1058 of the *Lehrbuch* as one of a welter of Latin and barbaric names for which the only valid generic name mentioned is again *F.* for *Felis* (by inference) in the combination *F. pardus*, without author or bibliographic reference. Oken also used the vernacular "*Art. P.*" on the same page for *Pardalis* in the concatenation, "*P. vulgaris, Panthera, F. Pardus* oder ächter Panthera, *Varia et Pardus*". It is evident that Oken no more proposed or used *Panthera* as a generic name on page 1058 than he did on page 1052, or elsewhere in the *Lehrbuch*. No ruling, decree or alchemy can transmute "Panthera" as used and understood by Oken into a generic name as used and understood by binominalists today or those of Oken's day.

Present opposition to "Pan Oken" is not directed against the generic name *Pan* as used and understood by modern authors. It is directed against Oken's *Lehrbuch* where generic names are not proposed as new and none are used co-ordinately or in any consistent form in the text book. Attribution of a generic name to Oken as author is an error. The addition of a page reference to the attribution reinforces the fiction.

Scientific names for animals are more than convenient handles. They are also symbolic instruments for the definition, description and comparison of taxa, and for the erection of phylogenetic schemes. Whatever the decisions or opinions of the International Commission, the systematist cannot accept a taxonomic name cited from a work where it does not appear as such or where its meaning is hopelessly confused or lacking.

It is difficult to understand why a zoologist should request the International Commission on Zoological Nomenclature to make use of its Plenary Powers for the purpose of making available as a valid generic name a non-generic or vernacular term blindly culled from a non-binominal work officially rejected for nomenclatural purposes. Perhaps the request stems from too literal a reading of the invitation proffered to zoologists (1956, Opinion 417, *Opinions and Declarations*, vol. 14 (1): 3) for submittal of "applications for the validation under the Plenary Powers of any name published [in the proscribed Oken's *Lehrbuch*], the rejection of which would, in their opinion, lead to instability or confusion in the nomenclature of the group concerned".

If it is assumed that the International Commission can use its Plenary Powers to validate dubious names from rejected works, it may be granted that the Commission can also make

available properly proposed and zoologically unambiguous generic names that happen to be junior synonyms of unused names or junior homonyms of unused or invalidly used names. Two cases might be considered:

1. *Pan* as a generic name for the chimpanzee has been used hundreds of times since its introduction into scientific literature by Palmer (1904, *Index Gen. Mamm.*: 508). The International Commission by use of its Plenary Powers can make *Pan* available as a generic name cited from Palmer, 1904, or any other binominal author, by suppression for purposes of Priority, of the generic names *Theranthropus* Brookes, 1828, *Chimpansee* Voigt, 1831, and *Anthropopithecus* Blainville, 1838.

2. *Panthera*, as a generic name for the great cats typified by *Felis pardus* Linnaeus, has been widely but not universally used since the term was mentioned by J.A. Allen (1902, *Bull. Amer. Mus. nat. Hist.*, vol. 16: 378) and Palmer (1904, *Index Gen. Mamm.*: 509). The valid generic name *Panthera*, however, can be dated from Severtzow (1858, *Revue et Mag. Zool.* (3) vol. 1; 386, 387, with type *Felis pardus* Linnaeus, selected by J.A. Allen, 1919, *Bull. Amer. Mus. nat. Hist.* vol. 41: 337). The International Commission on Zoological Nomenclature has the authority to make this name available by suppression for purposes of Priority, of the unused senior homonym *Panthera* Hübner, 1823 (a genus of Lepidoptera), and the widely used and competing senior synonym, *Leo* Brehm, 1829.

Zoologists who feel the need for conservation of *Pan* as the generic name for the chimpanzee, and *Panthera* as the generic name for the leopard are not obliged to base their proposals on Oken's *Lehrbuch* because the work was published in 1816.

Irrespective of the foregoing intimations, I see no need for modification of my stand in 1949 (*J. Mammal.*, vol. 30: 289) and 1966 (*Bull. zool. Nomencl.*, vol. 23: p. 67). Time has proven that the sinking of names stemming from Oken's *Lehrbuch* does not lead to instability or confusion, and that use of the pertinent valid and available names produces order and stability.

REPLY TO P. HERSHKOVITZ

By G.B. Corbet, J.E. Hill, J.M. Ingles and P.H. Napier (*British Museum (Natural History), Cromwell Road, London SW7 5BD*).

We agree with Dr. Hershkovitz that Oken (1816) is less than satisfactory but, nevertheless, it is our opinion that the original proposal offers the most straightforward method of retaining *Pan* and *Panthera* in the sense in which they are now widely used. Our objective in re-submitting the application was to expedite a decision and we urge that the International Commission decide as soon as possible between the various views expressed since the original submission over 26 years ago.

COMMENT ON *GIRAFFA CAMELOPARDALIS AUSTRALIS* RHOADS, 1896. Z.N.(S.) 1942 (see vol. 31: 171)

(1) By L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

I beg to differ from the Secretary's opinion concerning the status of the name *reticulata* de Winton, 1899, as published in the combination *Giraffa camelopardalis reticulata*. He says that this name "has been protected from the threat presented to its stability by the senior homonym *Camelopardalis giraffa* var. *reticulata* Weinland, 1863, by the use of the plenary powers in Opinion 944 ... and placed on the Official List of Specific Names in Zoology", implying that by this action the name *reticulata* de Winton, 1899, is safeguarded against any attack made on it.

I maintain that in Opinion 944 (*Bull. zool. Nomencl.* 27: 222), the Commission used its plenary powers to suppress the species-group name *reticulata* Weinland, 1863, but certainly did not validate the name *reticulata* de Winton, 1899. The fact that the latter name was placed

on the Official List does not give it an inviolable status; there are several names on the Official List which are currently considered invalid. As the validity of any name is entirely subjective, depending on the views of a zoologist, neither the Commission - nor any zoologist, for that matter - can declare a name valid. One can say at the most that one considers it the valid name for a taxon, but another specialist may have an entirely different opinion.

As the name *reticulata* de Winton, 1899, notwithstanding it is placed on the Official List, normally competes with other available names, it certainly is threatened by a senior synonym. Therefore if the Commission does not act on the proposal by Ansell and Dagg (*Bull. 28:* 100-101), the name *Giraffa camelopardalis australis* Rhoads, 1896 will, for those who think this name and *G.c. reticulata* de Winton, 1899 synonymous, be the valid name for the subspecies.

Other things being equal, the Commission should lend a sympathetic ear to requests for saving names that are on the List from threats that were not recognised when the name was originally placed on the List. Therefore I should have no qualms in the *Giraffa* case now to suppress the name *australis* in order to save *reticulata*.

(2) by Dr. Anne Innis Dagg (*University of Waterloo, Ontario, Canada N2L 3G1*)

I have prepared the following list of scientific papers on the giraffe which refer to the reticulated giraffe as *Giraffa camelopardalis reticulata*:

ANSELL, W.F.H., 1968. 8 Artiodactyla (excluding the genus *Gazella*). *Preliminary identification for African mammals*, Dr.J.A.J. Meester edit. Smithsonian Institution, Washington.

BOURLIÈRE, F., 1965. Some mammals of the Samburu Reserve in northern Kenya. *Afr. wild Life*, vol. 19 (3): 193-202

CULLY, W., 1958. *Giraffa camelopardalis. Parks and Recreation*, vol. 41 (4): 197-198.

DAGG, A.I., 1971. *Giraffa camelopardalis. Mammalian Species*, vol. 5: 1-8 (Amer. Soc. Mammal.)

GENSCH, W., 1969. Versuch der künstlichen Aufzucht einer Giraffe (*Giraffa camelopardalis* L.). *Zool. Gart.* vol. 37 (4/5): 231-242

KRUMBIEGEL, I., 1971 *Die Giraffe*. A. Ziemsen Verlag, Wittenberg Lutherstadt, 160 pp.

REVENTLOW, A. 1949. The growth of our giraffes and giraffe-calves. *Bijdr. Dierd.*, vol. 28: 394-396

SIDNEY, J., 1965. The past and present distribution of some African ungulates. *Trans. zool. Soc. London*, vol. 30: 139-168

STOTT, K., 1959. Giraffe intergradation in Kenya. *J. Mammal.*, vol. 40: 251

ZELLMER, G., 1960. Hand-rearing of giraffe at Bristol Zoo. *Internat. Zoo Yearbook*, vol. 2: 90-93

Of course I agree with Mr. Ansell that the name *australis* should not be given precedence over *reticulata*.

COMMENTS ON A CHALLENGE TO THE FAMILY NAME ATTACIDAE (INSECTA: LEPIDOPTERA). Z.N.(S.) 1997

(see volume 32: 149-152)

(1) By I.W.B. Nye, D.S. Fletcher and A. Watson (*British Museum (Natural History), London*)

We are in complete agreement with the main objective of this case. The name Saturniidae not only has priority but has had overwhelming usage this century throughout the world. The following are recent examples of use, in Australia (Common, 1970 and 1974), in Canada (Riotte, 1970), in Japan (Inoue, 1970), in Mexico (Vázquez, 1966), in Netherlands (Lempke, 1960), in New Zealand (Sharell, 1971), in Rhodesia (Pinhey, 1972), and many more could be cited.

1. We fully support proposals (3) and (4) of paragraph 10, and we also support the first part of proposal (1) to place the name *Saturnia* Schrank, 1802, on the Official List of Generic Names in Zoology. We disagree with the type-species designation in proposal (1), and we disagree with proposal(2).

2. Linnaeus, 1758, *Syst. Nat.* (Edn 10) vol. 1: 496-497, proposed the name *Phalaena* (*Bombyx*) *pavonia* followed by a brief description and a bibliography divided into two varieties *minor* and *major*. These latter names under the *Code*, Article 45(e)(i) as amended in 1972, must be interpreted as representing subspecies. Linnaeus himself referring to the two varieties stated "An Specie distinguendae?", and it was later established that they did represent two distinct species. Both were independently named in 1775 by Denis and Schiffermüller. The names and synonymy hitherto universally accepted are:

pavonia Linnaeus, 1758
pavonia minor Linnaeus, 1758
carpini [Denis & Schiffermüller], 1775

pyri [Denis & Schiffermüller] 1775
pavonia major Linnaeus, 1758

3. There is no confusion as to the identity of the species but there are two purely nomenclatural problems.

(A) No nominate subspecies *pavonia pavonia* was proposed by Linnaeus. We therefore here designate as lectotype of *Phalaena* (*Bombyx*) *pavonia* Linnaeus, 1758, and as lectotype of *Phalaena* (*Bombyx*) *pavonia minor* Linnaeus, 1758, the male specimen in the collection of the Linnean Society of London bearing the handwritten label "810 pavonia minor. mas", and ask the Commission to place *Phalaena pavonia* Linnaeus on the appropriate Official List.

(B) The name *major* Linnaeus, 1758, has not been used in this sense as a valid name for over 50 years, to the best of our knowledge, whereas its synonym *pyri* [Denis & Schiffermüller], 1775, has been used as the valid name in many works including the eleven marked with an asterisk in the bibliography. We therefore ask the Commission to place *Bombyx pyri* on the appropriate Official List and to use its plenary powers to grant *pyri* nomenclatural precedence over *pavonia major*.

4. Concerning the type-species of *Saturnia*, we consider that it is *Phalaena pavonia* Linnaeus, designated by Westwood (1840: 89) as *Phalaena pavonia minor* Linnaeus. Drs Sabrosky and Ferguson have, in paragraph 8 of their application, regarded this designation as invalid on the grounds that "neither Schrank nor Westwood indicated synonymy to relate it to one of the originally included nominal species". This is not so as Schrank when proposing *Saturnia* listed the third of his four originally included species as:

"3. Saturnia Carpini.
Bombyx Carpini *meiner Fauna n.* 1422"

This is a clear indication referring to the first part of his work in which Schrank gave descriptions and full synonymy with references. On page 249, under 1422, he cited *Bombyx carpini* with *Phalaena pavonia minor* in synonymy. The latter may therefore be accepted as one of the originally included nominal species in *Saturnia*.

5. The International Commission on Zoological Nomenclature is therefore asked to approve the following as alternatives to the original proposals:

(1) to place the genus-group name established as *Saturnia* Schrank, 1802 (gender: feminine), type-species *Phalaena pavonia* Linnaeus, 1758, by subsequent designation by Westwood (1840: 89), on the Official List of Generic Names in Zoology;

(2) to place the species-group name *pavonia*, as established in the combination *Phalaena* (*Bombyx*) *pavonia* Linnaeus, 1758, on the Official List of Specific Names in Zoology;

(3) (a) to use its plenary powers to rule that the species-group name *pyri*, as established in the combination *Bombyx pyri* [Denis & Schiffermüller], 1775, is to be given nomenclatural precedence over the species-group name *major* as established in the combination *Phalaena* (*Bombyx*) *pavonia major* Linnaeus, 1758, by any zoologist who considers that those names apply to the same zoological taxon. Having done so,

(b) to place the species-group name *pyri*, as established in the combination *Bombyx pyri* [Denis & Schiffermüller], 1775, on the Official List of Specific Names in Zoology, with the ruling that it has been granted nomenclatural precedence over *Phalaena* (*Bombyx*) *pavonia major* Linnaeus, 1758.

(4) as the original proposal (3) in *Bull. zool. Nom.* vol. 32: 152.

(5) as the original proposal (4) in *Bull. zool. Nom.* vol. 32: 152.

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(2) par Claude Lemaire (*c/o Laboratoire d'Entomologie, Muséum national d'Histoire naturelle, 45, rue de Buffon, 75005 - Paris*)

Le Dr. Sabrosky et le Dr. Ferguson ont soumis à la Commission un ensemble de propositions ayant pour objet principal l'inscription de SATURNIIDAE sur la Liste Officielle des Noms du Groupe-Famille, avec pour auteur Boisduval et pour date de publication [1837].

ATTACIDAE qui figure sur cette liste depuis 1957, en vertu de l'Opinion 450, deviendrait donc, du fait de la priorité de SATURNIIDAE, inutilisable pour désigner la famille concernée, son inscription n'étant maintenue que pour application éventuelle à un taxon subordonné du groupe-famille.

Sabrosky et Ferguson estiment que l'entrée d'ATTACIDAE sur la Liste Officielle, a crée une certaine confusion, en raison de l'existence, dont la Commission a été à l'époque insuffisamment informée, d'un nom à la fois plus ancien et plus couramment utilisé.

S'il est exact que des lacunes sont à reprocher à la procédure incriminée, et s'il est effectivement nécessaire de fixer une fois pour toutes le nom que doit porter cette famille de

Lépidoptères, il apparaît à l'examen que la solution envisagée n'est pas nécessairement la plus satisfaisante, qu'elle se heurte à des difficultés de principe, qu'un certain nombre de faits importants ont été omis ou insuffisamment indiqués dans le document précité et qu'il semble nécessaire d'en informer la Commission pour lui permettre de se prononcer en toute connaissance de cause.

Le cas pose une question préalable extrêmement importante et délicate puisque touchant directement au statut des noms inscrits sur les Listes Officielles et que la réponse dépend essentiellement de la portée juridique et pratique que l'on entend donner à cette inscription.

La situation actuelle avait d'ailleurs été prévue et réglée, en des termes parfaitement clairs, par l'article 19 du préambule à la Liste Officielle des Noms du Groupe-Famille en Zoologie (1958): "Un nom ainsi stabilisé doit être utilisé de préférence à tout autre pour le taxon concerné et il n'a pas à être remplacé par un autre nom du groupe-famille, même si... (2) il n'est pas le nom le plus ancien pour le taxon en question... tant que la Commission n'en aura pas ainsi décidé (1953, Copenhagen Decisions zool. Nomencl.: 37, Decision 58 (1)".

Malheureusement, par suite d'un oubli du Congrès de Londres (1958) et dans la rédaction du Code de 1961, les dispositions du Congrès de Copenhague relatives au statut des noms inscrits sur les Listes et Index Officiels n'ont pas été reprises dans le Code, si bien qu'à l'heure actuelle, dans le silence de ce dernier, il peut exister deux façons de considérer les Listes: soit qu'elles constituent un simple registre des décisions de la Commission, les noms qui y figurent n'étant utilisables que dans la mesure où ils ne contreviennent pas aux Lois de Priorité et d'Homonymie, soit que leur autorité s'impose aux Zoologistes et que les noms ainsi répertoriés soient ceux à utiliser en tout état de cause pour les taxa considérés, même en présence de noms plus anciens, tant que la Commission n'aura pas pris de décision contraire.

Dans la première interprétation, l'inscription d'ATTACIDAE sur la Liste Officielle signifie simplement que le nom est utilisable pour un taxon subordonné du groupe-famille ayant *Attacus* pour genre-type (ATTACINAE, ATTACINI), sans porter atteinte à la validité de SATURNIIDAE, dans la seconde, ATTACIDAE doit être regardé depuis 1957, date de l'Opinion 450, ayant décidé de son inscription, comme le nom officiel de la famille concernée.

S'il semble que cette seconde interprétation doive l'emporter, c'est parce que l'on ne voit pas quelle pourrait être l'utilité pratique d'une telle inscription et des Listes en général, si celles-ci n'avaient pas précisément pour objet d'apporter aux zoologistes, à la recherche du nom à utiliser pour un taxon donné, une indispensable garantie de validité. Que cette recherche soit parfois délicate, le cas actuel en est une excellente illustration, si l'on en juge par les erreurs qui ont été commises, même par de très hautes Autorités, aussi bien en ce qui concerne les dates, auteurs, priorités respectives d'ATTACIDAE et de SATURNIIDAE et si l'on sait notamment que la date de publication de ce dernier ne résulte que de preuves extrinsèques (dont il faut souhaiter qu'elles ne soient pas remises en question!) à un ouvrage relativement rare. Si, dans un tel cas, il n'est pas possible de se fier aux Listes Officielles, et si l'usage des noms qui y figurent peut être considéré comme mal fondé en droit, il est permis de se demander de quels moyens dispose l'utilisateur de bonne foi pour savoir comment désigner correctement le taxon auquel ses travaux sont consacrés.

Il paraît donc inutile d'insister davantage sur cet aspect essentiel du problème et sur la nécessité d'éviter de telles incertitudes ou revirements qui porteraient finalement atteinte à la stabilité de la Nomenclature dans le domaine des propres décisions de la Commission.

Quant aux faits se rapportant directement au cas présent, il faut tout d'abord souligner que, si l'on se reporte aux travaux préparatoires, l'idée d'une utilisation limitée à un taxon subordonné du groupe-famille n'a jamais même été envisagée par la Commission et qu'ATTACIDAE a bien été placé sur la Liste Officielle pour être utilisé au rang auquel il a été effectivement inscrit, au même titre que les sept autres noms (BOMBYCIDAE, GEOMETRIDAE, NOCTUIDAE, TORTRICIDAE, PYRALIDAE, TINEIDAE, ALUCITIDAE), dérivés des subdivisions génériques de Linné, validés par l'Opinion 450.

C'est d'ailleurs en fonction de la situation nouvelle créée par celle-ci et de l'usage qui en a résulté et non dans l'optique de 1957 où se sont placés Sabrosky et Ferguson, que l'opportunité d'une modification de la Liste Officielle doit être appréciée.

Or, il est certain que, si effectivement SATURNIIDAE était, avant 1957, le nom le plus utilisé, la situation s'est complètement inversée depuis l'inscription d'ATTACIDAE sur la Liste Officielle. Ce nom qui était déjà loin d'être à époque un *nomen oblitum*, ainsi qu'en témoigne

son emploi, notamment, à la suite de Hampson (1918), dans les importants travaux de Lhomme [1932-1933] et de Bourgogne (1951) est incontestablement celui qui a été le plus utilisé dans les 20 dernières années.

Il est frappant que la plupart des ouvrages mentionnés par Sabrosky et Ferguson sont antérieurs à 1957 et que le seul travail *spécialisé* important où SATURNIIDAE ait été employé sans restriction depuis cette date, soit précisément celui de Ferguson (1971-72) lui-même. Deux des auteurs ayant le plus publié sur cette famille, Darge (1969 et 8 autres publications) et Rougeot (1971 et plus de 30 autres publications) ont constamment utilisé ATTACIDAE, de même que Griveaud (1961), Aubert (1968) et Viette (1965).

Bien qu'ayant d'abord regretté que la Commssion n'ait pas strictement appliqué la Loi de Priorité dans la décision contestée, j'ai estimé devoir me conformer à celle-ci dans le travail (Lemaire, 1971) cité par Sabrosky et Ferguson, ainsi que dans 21 publications ultérieures.

Ainsi, contrairement à ce qui paraît résulter de la lecture des propositions, l'usage d'ATTACIDAE, au détriment de celui de SATURNIIDAE, s'est considérablement affirmé à la suite de l'Opinion 450, en particulier chez les spécialistes, et la situation sur laquelle la Commission aura à se prononcer est en fait totalement différente de celle de 1957.

De plus, il serait peut être choquant de désavouer implicitement les auteurs qui, en toute bonne foi ont utilisé un nom qu'ils étaient admis à considérer comme officialisé par la Commission et dont la seule erreur aurait été d'ignorer que le statut des noms inscrits sur la Liste Officielle était en réalité différent de celui qui figure dans le préambule même de cette liste!

L'action de Sabrosky et Ferguson aurait très certainement été fondée si l'Opinion 450, dans le cas d'ATTACIDAE, était restée lettre morte mais, étant donné ce qui précède, il est évident qu'un retour en arrière serait, plus que le *statu quo*, de nature à créer la confusion et à porter atteinte à la stabilité de la Nomenclature qui est un besoin constant pour tous les chercheurs.

Il paraît donc souhaitable, en rejetant toute proposition contraire, de maintenir purement et simplement, sur ce point essentiel les dispositions actuelles.

En revanche, indépendamment de la décision à intervenir sur la question précédente, il est nécessaire de corriger le nom d'auteur et la date, actuellement attribués sur la Liste Officielle au nom du groupe-famille ATTACIDAE.

Comme je l'avais moi-même suggéré initialement, Sabrosky et Ferguson proposent de remplacer Burmeister, 1878 par Duponchel, 1844. Il m'est apparu ultérieurement (Lemaire, 1975: 95) que le nom a été appliqué valablement pour la première fois à un taxon supragénérique par Blanchard (1840: 483), sous la forme ATTACITES, et que ce nom d'auteur et cette date sont ceux à mentionner, à la suite d'ATTACIDAE, sur la Liste Officielle.

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COMMENTS ON THE REVISED APPLICATION FOR A RULING ON THE STEM OF THE FAMILY—GROUP NAME BASED ON THE TYPE—GENUS *PETROMYZON* LINNAEUS, 1758. Z.N.(S.) 2045

(See vol. 32: 154-155)

(1) By W.I. Follett and Lillian J. Dempster (*California Academy of Sciences, San Francisco, California 94118, U.S.A.*)

In the revised application noted above, Drs. Vladykov and Gruchy have requested, *inter alia*, that the International Commission ascribe the designation of the type-species of *Petromyzon* Linnaeus, 1758, to Jordan (1917).

However, a much earlier designation of the type-species of *Petromyzon* is that by Jordan & Copeland (1877: 161): "*Petromyzon* Linnaeus, 1766. Type: *P. marinus* L." This type-designation is to be accepted as valid for *Petromyzon* Linnaeus, 1758, despite the reference to 1766 rather than 1758 (Article 67 (g)).

Drs. Vladykov and Gruchy have requested also that the Commission recognize the family-group name as dating from Petromyzides Risso, 1826.

But Risso's name for this family was not published as a scientific name, it was published as a French vernacular: "Les Pétromyzides". As such, it is not an available name unless "it has been generally accepted by zoologists interested in the group concerned *as dating from its first publication in vernacular form*" (Article 11 (e) (iii); emphasis added). Drs. Vladykov and Gruchy have failed to demonstrate that this family-group name has been generally accepted as dating from Risso (1826). On the contrary, we find that this family-group name has not been generally accepted as dating from Risso (1826). Pétromyzides Risso (1826: 99, 113) is therefore not an available name.

The earliest available name for this family that we have found is that of Bonaparte (1832: 165, 189): "Famiglia 36. Petromyzonidae".

Dr. Gruchy (*Bull. zool. Nomencl.* vol. 32: 20) states that, in his opinion, usage favours the stem Petromyzon-. He cites only 5 publications that use the stem Petromyzont-. However, our brief search reveals 53 publications (exclusive of those cited by Dr. Gruchy) that, during the past 50 years, have used the stem Petromyzont-.

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JORDAN, David S., and COPELAND, Herbert E., 1877. Check list of the fishes of the fresh waters of North America. *Bull. Buffalo Soc. nat. Sci.* vol. 3 (4): 133-164.

(2) By C. Richard Robins (*Chairman, Committee on Names of Fishes, American Fisheries Society and American Society of Ichthyologists and Herpetologists; Maytag Professor of Ichthyology, School of Marine and Atmospheric Science, University of Miami.*

In his comments on the petition concerning the stem of the family-group name for the lampreys, Carl L. Hubbs (*Bull. zool. Nomencl.*, vol. 32: 18-19) stated that the Committee on Names of Fishes in the 1960 and 1970 editions of its list "without explanation, named

Petromyzontiformes... and the family... Petromyzontidae". The implication that the committee originated this spelling or departed from custom of the day in using it is unfortunate and incorrect. It was not until the 1970 edition that the committee instituted the policy of documenting changes from the previous edition and therefore no reason was given for the use of Petromyzontidae or, for that matter, any other name, in the 1960 edition

A widely used and standard fish book in North America is "Fishes of the Great Lakes Region" by Carl L. Hubbs and Karl F. Lagler. In 1947, this work used the spelling Petromyzonidae but in the third printing (1952) this name was changed to Petromyzontidae and this spelling is repeated in the extensively revised 1958 edition. Moreover, in an "unpublished" but extensively circulated, dated (1953) and mechanically reproduced "Manuscript List of the Fishes of California" by Carl L. Hubbs and W.I. Follett, the name Petromyzontidae was also used. In "Iowa Fish and Fishing", (1951), an important state ichthyology, and another widely used publication, the authors (James R. Harlan and Everett B. Speaker) used Petromyzontidae, presumably in agreement with Reeve M. Bailey, whose checklist and keys to Iowa fishes (included at the end of their book) also employed Petromyzontidae. None of the commentors to the Commission seems to have mentioned these works.

The Committee on names of Fishes meeting in Williamsburg, Virginia, in June, 1975 agreed that the family-group name in question should be stabilized but declined to submit any opinion as to its choice to the Commission. It did wish to note that in employing Petromyzontidae in 1960 it followed the literature widely used in North America, literature coincidentally authored by some of the foremost authorities on lampreys.

While the Committee recognizes that its list will be used as a source of scientific as well as common names and has carefully edited its work to that end, it provided in the 1970 edition (p. 4) a specific discussion of the scientific names stating "The purpose of this list is to recommend common names for North American fishes; it is not to impose scientific names".

COMMENTS ON CIRCINAE SUNDEVALL, 1836 (AVES) VERSUS CIRCINAE DALL, 1895 (MOLLUSCA). Z.N.(S.) 2112

(see vol. 32: 270-273)

(1) By E. Eisenmann (*American Museum of Natural History, New York, N.Y. 10024, U.S.A.*)

Dr. Roth calls attention to the family-group name homonymy between CIRCINAE Sundevall, 1836 based on *Circus* Lacépède, 1799, used for the harriers (French "busards"; German "Weihen"), and CIRCINAE Dall, 1895, based on the bivalve genus *Circe* Schumacher, 1817. He askes that the avian name, which is earlier, be placed on the Official List and that the molluscan name be emended to CIRCEINAE and then placed on the Official List. Dr. Roth also points out that Sundevall in introducing the avian name (as a tribal name CIRCI) credited the generic name *Circus* to Bechstein, whereas it was established by Lacépède (1799, Tabl. Ois. : 4) with type-species *Falco aeruginosus* Linnaeus, 1758 (the Marsh Harrier).

As chairman of the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress and of the American Ornithologists' Union Committee on Classification and Nomenclature, I support on behalf of these committees Dr. Roth's proposals in their main objectives. I cannot, however, see the need, or justification, for declaring Bechstein's use of *Circus* a "cheironym". A cheironym is an unpublished *manuscript* name. So far as is known, Bechstein published only the plural form "Circi" and that only once (as referred to by Dr. Roth) in 1802, later than the publication of *Circus* Lacépède, 1799, and with the same meaning.

It is, of course, possible that Bechstein, who was publishing before 1799, may have published the name *Circus* before Lacépède, and that this has lain undiscovered. If so, Dr. Roth's proposal (1)(a) still does not help matters; but his proposal (1)(b) would be strengthened by the addition of the words "regardless of any prior publication by Bechstein".

I also think that the statement in proposal (1)(d) is misleading since it might be taken to imply that CIRCINAE Dall, 1895, was always an incorrect original spelling, which is factually incorrect. It appears to me that, given proposal (1)(c), proposal (1)(d) is superfluous and can be dropped.

(2) by G N Kashin (*Prospect Vernadskogo No 61 app 53 Moscow 117415 U S S R*)

There is one proposal missing from Dr. Roth's application:

(5) (b) to place the family-group name CIRCI Sundevall, 1836, on the Official Index of Rejected and Invalid Family-Group Names in Zoology as an incorrect original spelling for CIRCINAE Sundevall, 1836.

It is necessary to take this step.

(3) By R.K. Brooke, (*P.O. Box 1690, Salisbury, Rhodesia*)

Dr. Roth is quite right (*Bull. zool. Nomencl.* vol. 32: 270-273) to raise the problem of the homonymous family-group name CIRCINAE in both the Aves and the Mollusca. He proposes that the Commission alter the molluscan name to void the homonymy on the grounds, apparently, that the avian name has priority and is in current use in ornithological systematics. Article 55(a) of the Code does not require the Commission to make its decision in terms of priority though in view of the Preamble it must have great weight. Dr. Roth's belief that the avian CIRCINAE is in current use is not, I believe, correct. While there has been no recent review of the ACCIPITRIDAE Vieillot, 1816, the family to which the avian CIRCINAE is now universally considered to belong, I think I am right in saying that ornithological systematists are more and more inclined to the view that the ACCIPITRIDAE are oversplit (cf. Brown & Amadon, 1968 and Sibley & Ahlquist, 1972). This means that the avian CIRCINAE is unlikely ever again to be regarded as a valid taxon with the corollary that it is the more suitable name to suffer an arbitrary but necessary change of spelling and pronunciation. Stability of the molluscan CIRCINAE is of greater importance to many since it appears to be a name in current use in a much studied taxon.

I suggest that Dr. Roth's proposals 6(1)(c) and (d) be deleted and the following substituted:-

(c) to declare that the stem of the generic name *Circus* Lacépède, 1799, for the purpose of Article 29 is CIRCO-;

(d) to declare CIRCINAE Sundevall, 1836, an incorrect original spelling of CIRCOINAE Sundevall, 1836.

This suggestion will require consequential amendments to Dr. Roth's proposals 6(2) and (3).

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(4) Reply by Dr Roth to Mr Brooke

I believe that Mr Brookes alternative proposal merits support. If ornithological systematists share his belief that the avian CIRCINAE is unlikely to figure importantly in future work, then emendation of it, rather than the molluscan CIRCINAE, is to be preferred.

A recent paper — Fischer-Piette, E. & Vukadinovic, D., 1975. Révision des Circinae... du Muséum national d'Histoire naturelle, *J. Conchyl.*, vol. 112: 3-74 — adds further to the usage of the molluscan CIRCINAE. These authors consider *Circe* Schumacher, 1817, a junior synonym of *Gafrarium* Röding, 1798, and correctly (Article 40) maintain the family-group name based on *Circe*.

(5) By David Heppell (*The Royal Scottish Museum, Edinburgh EH1 1JF, Scotland*)

It is always dissatisfying to have to accept the legal fiction of a correctly formed and well known family-group name becoming an incorrect original spelling for some newly coined mutation. The proposed emendation of CIRCINAE to CIRCEINAE to avoid the homonymy arising from similar type-genera is no exception. In this case an alternative name is available based on a genus so close to *Circe* that several authors have regarded the one as no more than

a subgenus of the other. The name GAFRARIINAE or GAFRARIIDAE is not an innovation of Nordsieck's but dates at least from Korobkov (1954: 166) where it is used for the genus *Gafrarium* and the subgenus *Circe*. As this work is a text-book it seems likely that the authorship of GAFRARIIDAE should be sought in the Russian literature earlier than 1954. I submit therefore the alternative proposal that CIRCINAE Dall, 1895, be rejected as a junior homonym of CIRCINAE Sundevall, 1836. GAFRARIINAE can then be used as the name for the subfamily, the author and date being somewhat immaterial.

REFERENCE

KOROBKOV, I.A., 1954 *Spravochnik i metodicheskoe rukovodstvo po Tretichnim Mollyuskam*. Plastinchatozhabernie. 444 pp. incl. 96 pls. Leningrad.

COMMENT ON THE PROPOSED SUPPRESSION OF *PARNALIUS* RAFINESQUE, 1815, IN FAVOUR OF *ZERYNTHIA* OCHSENHEIMER, 1816. Z.N.(S.)1884.

(see vol. 31: 204-5)

(1) By O. Kudrna (*Portsmouth Polytechnic, Portsmouth, England*) and P.R. Ackery (*British Museum (Natural History), London SW7 5BD*)

The main point of the application by Riley and Higgins in this case is that *Parnalius* Rafinesque, 1815 had remained unused from its publication in 1815 until 1969. It had, however, been correctly listed in both Sherborn's *Index Animalium* and in Neave's *Nomenclator Zoologicus*. However, since the name was revived in 1969 it has rapidly gained acceptance and has been used in a number of publications, many of which are likely to become standard works of reference on butterflies. To those listed by Riley and Higgins, we add:

ACKERY, P.R., 1975. *Bull. Br. Mus. (nat. Hist.)* (Ent.), vol. 31: 71-105, 16 pls.

WATSON, A., and others 1975. *The dictionary of butterflies and moths in colour* [xvi] + 296 pp., 144 pls. New York.

KUDRNA, O., 1975. Final chapter of 1974 season summary. *News Lepid. Soc.* for 1975, No. 1: 3-4

SMART, P., 1975. *The international butterfly book*. 275 pp. New York.

In these circumstances we feel that the International Commission need not take the action proposed by Riley and Higgins and that the Law of Priority should apply.

(2) reply by N.D. Riley and L.G. Higgins

At the time when our application was originally submitted to the Commission, in 1969, *Parnalius* Rafinesque had never been used in the primary literature since its original publication in 1815, 154 years earlier. It was as though it had been still-born. Under Art. 79b(i) the listings in Sherborn and Neave do not constitute usage, as Drs Kudrna and Ackery must know.

It is not in dispute that in the interval since 1969, *Parnalius* has been used on the occasions that Kudrna and Ackery enumerate, all of them in contravention of the Code as amended in 1972, and certainly contrary to its spirit. We consider that these events do not affect the validity of our application, which we see no reason to amend. Accordingly, we ask that it be considered by the Commission as it stands and voted upon at an early opportunity.

We call attention to the fact that, under Article 40, the family-group name ZERYNTHIINAE Kirby (1904-1906) remains valid, whatever the decision of the Commission regarding the generic names involved.

COMMENTS ON THE PROPOSED DESIGNATIONS OF TYPE-SPECIES FOR *ERIOPHYES* SIEBOLD, 1851 AND *PHYTOPTUS* DUJARDIN, 1851 (ACARINA: ERIOPHYOIDEA). Z.N.(S.) 2044.

(see vol. 30: 196-197, vol. 32: 17-18, 86-94)

(1) By Evert E. Lindquist (*Biosystematics Research Institute, Agri ulture Canada, Ottawa, Ontario, K1A OC6, Canada*)

This is written in response to the comments by H.H. Keifer, R.A. Newkirk and L.R. Jeppson regarding this case.

The comments by Keifer and Newkirk are unfortunately distorted and provincial in outlook. The goal of the Code is to achieve stability and universality in nomenclature, that is, an *international* common usage. The only acarologists actively supporting the comments of Keifer and Newkirk are some of their own American colleagues. They indicate that they know of no other objections to their 1971 name changes other than those of the Soviet acarologists. Yet, Keifer knew of mine a year ago through personal correspondence when he was seeking support for his views. Far more important, a perusal of the recent eriophyid literature *throughout the world,* except for the United States, shows nearly total lack of adoption of Newkirk and Keifer's 1971 changes in nomenclature. Only a handful of American workers, within the sphere of influence of Keifer and Newkirk, have accepted their changes in publications. Yet they "presume 'wholehearted support' ".

Keifer and Newkirk rest their case heavily on "following the provisions of the Code". But the problem was created by Keifer's *not* following the Code for over 30 years, and then abruptly making changes instead of drafting a proposal for *international* consideration by the Commssion.

Keifer and Newkirk refer to having consulted about this problem with "other interested zoologists", who remain unnamed. It seems unlikely that any of these zoologists were eriophyid specialists outside the United States. It would have been preferable to seek a consensus from leading specialists of the world, and then to draft a proposal to the Commission. Also, they justify their action in part on "needless and numerous exceptions" not serving the stability and universality of nomenclature. However, this case is concerned with neither "needless" nor "numerous" exceptions. The justification for occasional, carefully-considered exceptions, for the sake of maintaining international common usage, has been well expressed recently by Menke and Bohart (1975 *Bull. zool. Nomencl.* 32: 97-98) in another, unrelated case currently up for consideration by the Commission: such cases are by no means precedent-setting, but instead are reasonable solutions to special taxonomic problems.

Keifer and Newkirk's citing of an action taken by Nalepa in 1878 is hardly to be taken seriously. There was little literature (other than Nalepa's) on the ERIOPHYIDAE in Nalepa's day, and he was the dominant force among a few specialists. Today, there is a relatively vast, international compilation of literature on this group, and there are a number of leading specialists throughout the world, none of whom are dominated by another.

Keifer and Newkirk's arguments — (a) that only a few, rather than many, species of ERIOPHYIDAE are of great economic importance; (b) that the species with changed binominals are still recognized by their E.S.A.-approved vernacular names in the applied economic literature; and (c) that the U.S. EPA list uses the changed binominals — show a lack of understanding of the world literature on this group. There are many eriophyid species of economic importance throughout the world, the majority of which do not have American-approved vernacular names (what would such names mean to German, Indian, Brazilian, Russian, etc. workers?), and are not accounted for by the U.S. EPA list. To suggest that, because the E.S.A. has world-wide membership, its approved vernacular names and binominals have world-wide acceptance, is therefore misleading and somewhat presumptuous.

Finally, a response to Dr. Lee R. Jeppson's note in support of Newkirk and Keifer's 1971

changes. He advocates adhering to established rules in the Code, and refers to a new book on plant-feeding mites, jointly-authored by him, which is purported to be world-wide in scope and employs the changed binominals for eriophyid mites. Yet, in this very book, he persists with Keifer (another of the authors) in *not* following the Code regarding family-group names! Also, the book is not as comprehensive for the economically important eriophyids which do not occur in North America as for those that do.

This case is not merely one of divergence of usage between Russian and American specialists, as the comments on it unfortunately suggest. If the recent eriophyid literature from other countries and in other languages is considered, it will be found that Newkirk and Keifer's changes are followed in very few taxonomic or applied papers.

(2) By Dr. D.C.M. Manson, (*Department of Agriculture, Plant Health and Diagnostic Station P.O. Box 241, Levin, New Zealand*)

Having seen Evert E. Lindquist's comments on this name change (*Bull. zool. Nomencl.* vol. 32: 17-18) I would like to say I fully agree with his proposals, and support the retention of the usage of the generic names *Eriophyes, Phytoptus* and *Aceria* as known prior to Newkirk and Keifer's 1971 paper.

Lindquist's proposals are logical and common sense ones, whereas although Newkirk and Keifer may be "legally" correct, the introduction at this stage of new definitions for *Eriophyes, Phytoptus* and *Aceria,* all standard and well recognized genera, would create considerable confusion to both students and specialists alike.

(3) By Magdalena K.P. Smith Meyer (*Plant Protection Research Institute, Pretoria, South Africa*)

Newkirk & Keifer (1971) published an article containing changes in the nomenclature of some eriophyid species. Shevtchenko (1974) and Lindquist (1975) objected against the changes of the names and the concepts of some of the most important genera and species. They pointed out that the names of many economic important species are subjected to changes and that may lead to confusion among taxonomists and biologists.

Herewith I want to support Shevtchenko's proposal that the previous designations of the type-species of the genera concerned are retained and that the situation is left unchanged as before the publication of Newkirk & Keifer's paper because of the long-established usage of these names.

LITERATURE CITED

NEWKIRK, R.A. & KEIFER, H.H., 1971. Revision of types of *Eriophyes* and *Phytoptus*. Eriophyid studies, C-5, Agric. Res. Serv., U.S. Dep. Agric. : 1-14.

LINDQUIST, E.E., 1975. Comment on the proposed designations of type-species for *Eriophyes* Siebold, 1851 and *Phytoptus* Dujardin, 1851 (Acarina, Eriophyoidea). Z.N.(S.) 2044.*Bull. zool. Nomencl.* 32(1): 17-18.

(4) By G.W. Ramsay (*Department of Scientific and Industrial Research, Entomology Division, Mt. Albert Research Centre, Auckland, New Zealand*)

In response to the various petitions and comments by Keifer, Newkirk, Jeppson, Lindquist, Shevtchenko, Sukhareva and Sapozhnikova concerning the proposed changes with the names of three eriophyid mite genera (published not only in this *Bulletin*, but also in *Canadian Entomologist* vol. 106: 209-212, 1974) I write to support the case developed by Lindquist and Shevtchenko against the proposed changes.

The three names concerned, *Aceria, Eriophyes* and *Phytoptus* are widely used and involve species of economic importance as shown by Shevtchenko (*Bull. zool. Nomencl.* vol. 32(2): 91-94, 1975). He lists numerous and important scientific publications in which these generic names have been used in their established sense during the past decade. The

Australian Common Names List (CSIRO Bulletin 287, 1973) retains the pre-1971 usage as will a forthcoming New Zealand List and a projected World List of Common Names of Acari. This being so there can be no doubt that the proposed changes, although in "complete formal agreement with the provisions of the Code", can only result in the "utmost confusion". The assumption that because the Entomological Society of America with a world-wide membership accepts the standard Common Names of the species concerned and recognises the proposed changes so therefore a majority of world acarologists agree with these changes, is parochial. Even in the English speaking world the standard common names of the EPA and ESA lists are not uniformly used. The fact that some of the species concerned have standard common names will not help with langauges other than English.

It is unreasonable to expect all users to realise that *Eriophyes* after a certain date is identical with *Aceria* and that *Eriophyes* before that date is really *Phytoptus*. The points set out by Lindquist negate the case for change from the viewpoint of usage.

Therefore, for the sake of stability, the common usage of *Aceria*, *Eriophyes* and *Phytoptus* should be accepted and the proposed changes declined.

These remarks are supported by Dr. E. Collyer, Dr. R.M. Emberson and Mr. D.C.M. Manson.

COMMENTS ON THE REQUEST TO DETERMINE THE GENERIC NAMES OF THE BABOON AND THE MANDRILL. Z.N.(S.) 2093

(see vol. 33: 46-60)

(1) by L.B. Holthuis (*Rijksmuseum van Natuurlijke Historie, Leiden, Netherlands*)

The type-species of *Papio* P.L. Statius Muller, 1773 is *Simia sphinx* Linnaeus, 1758, by Linnean tautonymy. Statius Muller (1773: 123) cited *Papio* of Jonstonus and Ray under *Simia sphinx*, as did Linnaeus (1758: 25). There is therefore no need to use the plenary powers to designate *Simia sphinx* L., 1758, the type-species of *Papio* Statius Muller, 1773. Also, because of the absence of any type material of *Simia sphinx*, the plenary powers are not needed to designate the neotype of that species; the designation in *Bull. zool. Nomencl.* vol. 33: 54 is fully valid. Alternative A, para (a) is thus entirely superfluous, and in para (b) (1) the words "type-species under the plenary powers in A(a) above " should be changed to "type-species by Linnean tautonymy".

In order to save *Papio* Erxleben, 1777, it is not only necessary to suppress *Papio* Statius Muller, 1773, for purposes of both the Law of Priority and the Law of Homonymy, but to do so also for all uses of *Papio* before its publication by Erxleben in 1777.

The type-species of *Papio* Erxleben, 1777 is likewise *Simia sphinx* L., 1758, by Linnean tautonymy.

Papio Statius Muller, 1773, and *Papio* Erxleben, 1777, are thus not only homonyms, but also objective synonyms. What, therefore, is the use of suppressing one to save the other? The only difference is in the author's name and the year. The purposes of Alternative B would be reached just as well if the plenary powers were used to designate *Cynocephalus papio* Desmarest, 1820 the type-species of *Papio* Statius Muller. In this way only one, not two actions under the plenary powers are needed.

Alternative B, para (a) would run as follows:

(a) to use its plenary powers to set aside all designations of type-species prior to the Ruling here requested for the nominal genus *Papio* Statius Muller, 1773, and having done so to designate *Cynocephalus papio* Desmarest, 1820, as the type-species of that genus;

In the succeeding paragraphs, *Papio* Erxleben, 1777, should be replaced by *Papio* Statius Muller, 1773, and para (d) can be deleted.

The author's name for *Papio* is usually cited as Muller, but in fact it is more correctly Statius Muller.

(2) by E. Delson and P. H. Napier

Dr Holthuis's comment makes certain alterations necessary to both Alternatives A and B of our original request.

In Alternative A it is no longer necessary to designate the type-species of *Papio* Muller, as Linnean tautonymy constitutes an original designation under Article 68. Alternative A should therefore now read:

Alternative A: to uphold priority and thus

(a) place the following names on the Official List of Generic Names in Zoology:

(i) *Papio* Muller, 1773 (gender: masculine), type-species, by Linnean tautonymy, *Simia sphinx* Linnaeus, 1758, as defined by the neotype designated by Delson & Napier, 1976:

(ii) *Chaeropithecus* ...

In Alternative B there is now a question as to whether *Cynocephalus papio* Desmarest, 1820, the Guinea baboon, should be designated as type-species of *Papio* Muller (as suggested by Dr. Holthuis) or of *Papio* Erxleben. Nomenclaturally speaking, the two are objectively identical, but they differ both in original content and in taxonomic usage. Indeed, it is this difference that is the whole point of the presentation of two alternatives to the Commission, as follows:

Papio Muller, 1773, the candidate of Alternative A, is zoologically speaking a hotch-potch from its included species (*S. nemestrina* L., 1766, *S. apedia* L., 1758 and *S. sphinx* L., 1758). However, although its type-species by Linnean tautonymy, *S. sphinx*, may be either a drill or a mandrill from its cited synonyms, it is described unequivocally as a mandrill and is so fixed by the neotype which we have jointly designated.

Papio Erxleben, 1777, includes not only all the original content of *Papio* Muller, 1773, but two further mandrills, *S. maimon* and *S. mormon* L., 1766. However, Erxleben's concept of the type-species, *S. sphinx*, was composite; he described a Guinea baboon (with red-brown coat and differing from Linnaeus's animal in lacking whiskers) although he included mandrills among the cited synonyms. But the generic name has come to be attached to Erxleben's description, so that any citation of it with him as author implies a "savannah" baboon, and it is the extensive usage of the name in that sense which Alternative B requests the Commission to uphold. Briefly, while it is entirely appropriate to interpret *Papio* Erxleben as a "savannah" baboon, to re-define *Papio* Muller in that way would be less than satisfactory and, indeed, confusing. To follow Dr Holthuis's suggestion would be to compound the existing confusion; we offer a choice between two ways of removing its cause.

We accept Dr. Holthuis's point in his second paragraph and amend the first part of Alternative B as follows:

Alternative B: to uphold widespread current usage and thus:

(1) suppress the generic name *Papio* Muller, 1773, and all uses of *Papio* prior to its publication by Erxleben in 1777, for the purposes of both the Law of Priority and the Law of Homonymy.

In citing Philipp Ludwig Statius Muller as Muller we follow the examples of the printed catalogues of the libraries of the British Museum (Natural History) and the Zoological Society of London.

(3) by J. Meester (*University of Natal, Pietermaritzburg, Natal, South Africa*).

Having studied this application I tend to favour the retention of *Papio* for the savanna baboons (i.e. alternative B). I am not really convinced of the generic distinctness of the baboons and mandrills, and while the generic name *Papio* includes both, as it does in much current literature, nomenclatural stability is not seriously at risk. However, for those authors who prefer to distinguish between them the instability implicit in the use of *Chaeropithecus* for the baboons would be serious. If we had been dealing, for example, with shrews or bats, where most of the workers concerned are taxonomically literate, it would not have worried me as much, but particularly in Primatology, with so many workers with little taxonomic, or even zoological background, I believe this instability would be most undesirable. Most workers in

this field seem to have trouble naming their animals properly even within the framework of a stable nomenclature, and if the name *Papio* should change its meaning in midstream, so to speak, the mind boggles at the resulting confusion.

For these reasons, and despite my necessary fundamental adherence to the principle of priority, I support alternative B.

(4) by Dr. Reay H.N. Smithers, *Associate Curator of Mammals, Queen Victoria Museum, Causeway, Rhodesia.*

I believe that not to support Alternative B at this stage would cause confusion as then there would have to be a reversal of all that has been published over the last 50 years or so.

To enforce the rule of priority in this case by reverting to the generic name *Papio* for the drill and mandrill and *Chaeropithecus* for the baboon would in view of the very large volume of veterinary, biomedical and biological research, be to my mind an unnecessary retrograde step which should at all costs be avoided. They are now too well known under their present genera.

COMMENT ON THE REVIVED APPLICATION CONCERNING *TIPULA OLERACEA* LINNAEUS, 1758. Z.N.(S.) 896
(see vol. 33: 39-45)

(1) By L.B. Holthuis (*Rijksmuseum van Naturlijke Historie, Leiden, Netherlands*)

The following change is required in paragraph 14 (: 44):

(1) Add in subpara (1)(b) after "*Tipula paludosa*", "and all uses of this name before the publication in 1830 of the name *Tipula paludosa* by Meigen." [This date was inadvertently wrongly given as "1803" on p. 41, para 7, line 9. R.V.M.]

I am opposed to the endorsement proposed in subpara (3) (c) of para 14 on : 44. I do not see why we have to say that "the Law of Priority is to apply when these names are held to denote a single taxon at the same level in the species-group". Does this mean that this Law does not apply when they are used at different levels? Besides, no special endorsement is needed for the Law of Priority to be applied; it applies automatically unless the Commission uses its plenary powers to set it aside. If *T. subcunctans* Alexander, 1921, and *T. czizeki* de Jong, 1925, are both placed on the Official List, this means that the former has priority over the latter.

(2) Reply by the Secretary

I was responsible for the endorsement to subpara (3) (c) of para 14 of the application. I inserted it with the following considerations in mind.

First, Hemmingsen & Lemche proposed that *subcunctans* should be suppressed in favour of the junior name *czizeki*. The present applicants (Hutson, Vane-Wright & Cranston) do not support this suggestion. It therefore seemed well that they should ask the Commission to state unequivocally that the Law of Priority should apply.

Secondly, it seems to me that the Law of Priority can only apply when the two names are used for the same taxon at a given level in the species-group. If they are used for the same species, the Law of Priority makes *subcunctans* the valid name; but if they are used for different species they are independently valid and do not compete for priority. If *subcunctans* is divided into subspecies, the nominate subspecies is *subcunctans* ; if *czizeki* is regarded as another name for the same subspecies, the Law of Priority makes *T.s. subcunctans* the valid name, and *T.s. czizeki* the invalid one. But if they are employed for different subspecies of *subcunctans* (or for subspecies of different species), then they are independently valid and do not compete for priority.

I agree, however, that there is no need to cumber the Official Lists with unnecessary endorsements. I am quite prepared to invite the members of the Comission to vote separately on whether the endorsement in question is to be included (for the sake of clarity) or omitted.

OPINION 1065

POLYZONIUM GERMANICUM BRANDT, 1837, CONSERVED; *PLATYULUS AUDOUINII* GERVAIS, 1836, SUPPRESSED (DIPLOPODA, POLYZONIIDA)

RULING. - (1) Under the plenary powers

(a) the generic name *Platyulus* Gervais, 1836, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(b) the specific name *audouinii* Gervais, 1836, as published in the binomen *Platyulus audouinii*, is hereby suppressed for the purposes of the Law of Priority but not for those of the Law of Homonymy.

(2) The generic name *Polyzonium* Brandt, 1837 (gender: neuter), type-species, by monotypy, *Polyzonium germanicum* Brandt, 1837, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2035.

(3) The specific name *germanicum* Brandt, 1837, as published in the binomen *Polyzonium germanicum* (specific name of type-species of *Polyzonium* Brandt, 1837) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2585.

(4) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified:

(a) *Platyulus* Gervais, 1836, as suppressed under the plenary powers in (1) (a) above (Name Number 2075);

(b) *Platyjulus* Brandt, 1840 (an unjustified emendation of *Platyulus* Gervais, 1836 (Name Number 2076).

(5) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *audouinii* Gervais, 1836, as published in the binomen *Platyulus audouinii*, and as suppressed under the plenary powers in (1) (b) above (Name Number 1014);

(b) *audouinianus* Gervais, 1837, as published in the binomen *Platyulus audouinianus* (an incorrect subsequent spelling of *audouinii*, *Platyulus*, Gervais, 1836) (Name Number 1015).

(6) The family name POLYZONIIDAE Newport, G.V., 1844, is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 480.

HISTORY OF THE CASE Z.N.(S.) 1962

An application from Dr. C.A.W. Jeekel (*Institut voor Taxonomische Zoölogie, University of Amsterdam, The Netherlands*) for the validation of

the generic name *Polyzonium* Brandt, 1837, and the specific name *germanicum, Polyzonium,* Brandt, 1837, was received on 22 March 1971. It was sent to the printer on 8 July 1971 and was published on 8 December 1971 in *Bull. zool. Nomencl.* vol. 28: 126-128. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* and was sent to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97) and to eight entomological serials. The application was opposed by Professor Ernst Mayr and supported by Dr. Nell B. Causey (*Louisiana State University, Baton Rouge, Louisiana 70803, USA*) and Dr. H.F. Loomis (*U.S. Department of Agriculture, Crops Research Division, Miami, Florida 33158, USA*).

Before the case was submitted for a vote, the XVII International Congress of Zoology (Monaco, 1972) adopted the modifications to Articles 23a, b and 79b published in *Bull. zool. Nomencl.* vol. 31: 79-81 and 87-89. Dr. Jeekel was accordingly asked to provide references to the use of *Polyzonium germanicum* by five authors in ten publications in the preceding fifty years. Owing to delays outside his own control he was unable to do this before January 1975. The references are:

BLOWER, J.G., 1958. British Millipedes (Diplopoda), *Synopses Br. Fauna,* vol. 11: 72.

BROLEMANN, H.W., 1935. Myriapodes Diplopodes (Chilognathes I), *Faune Fr.,* vol. 29: 102, 104.

HAMMER, P., 1931. Tusindben (Myriapoda), *Danm. Fauna,* vol. 35: 110, 111

LANG, J., 1954. Mnohonozky - Diplopoda, *Fauna CSR,* vol. 2: 1-187 (147).

PALMÉN, E., 1949. The Diplopoda of Eastern Fennoscandia, *Suomal. elain- ja kasvit. seur. van. elain. Julk,* vol. 13 (6): 43

SCHUBART, O., 1934. Tausendfüssler oder Myriapoda I: Diplopoda, *Tierwelt Dtl.* vol. 28: 302.

STOJALOWSKA, W., 1961. Krocionogi (Diplopoda) Polski, (Warszawa, Panstwowe dawnictwo Naukowe), p. 179.

STRASSER, K., 1966. Uber Diplopoden Bulgariens, *Annls zool. Warsz.,* vol. 23 (12): 331, 375. (*Polyzonium germanicum* Brandt, 1831).

———————— Die Diplopoden Sloweniens, Porocila, *Acta carsol.* vol. 4: 205-220.

VERHOEFF, K.W., 1934. Diplopoda, Symphyla, Pauropoda, Chilopoda, *Tierwelt Mitteleur.* vol. 2(3): 53.

DECISION OF THE COMMISSION

On 16 June 1975 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (75)9 for or against the proposals published in *Bull. zool. Nomencl.* vol. 27: 127. At the close of the Voting Period on 16 September 1975 the state of the voting was as follows:

Affirmative votes — seventeen (17) received in the following order: Eisenmann, Melville, Lemche, Willink, Holthuis, Vokes, Starobogatov, Mayr, Tortonese, Sabrosky, Binder, Rohdendorf, Corliss, Alvarado, Ride,

Bayer, Habe

Negative votes — three (3): Dupuis, Bernardi, Nye

Abstention: Mroczkowski

Late Affirmative votes: Brinck, Kraus

Voting Papers not returned: Simpson, Heppell, Erben.

In January 1976, when the present Opinion was in preparation, Dr. Jeekel wrote to draw attention to an error of fact that he had discovered in his application. The family name POLYZONIIDAE was first published, not by Gervais, 1844 (? August) as there stated, but by Newport, G.V., 1844 (May), Conclusion of Mr. Newport's "Monograph of the Myriapoda Chilopoda", *Proc. linn. Soc. London,* vol. 1: 195. This discovery entailed the alteration of an entry in the Official List already voted on by the Commission. On 31 January 1976 I therefore wrote to the members of the Commission asking for approval for the correction of that entry and asked for replies by 10 March 1976. On that day my proposal had been approved by Professor Brinck and Dr. Eisenmann and opposed by M. Dupuis. The correction was accordingly made.

The following comments were sent in by members of the Commission with their voting papers:

Dupuis: J'aurais préféré une proposition validant *Polyzonium germanicum* dès 1834.

Mroczkowski: I propose another, very simple solution of the problem: to use the plenary powers to rule that the valid date of publication of the generic name *Polyzonium* Brandt and the specific name *germanicum* Brandt is 1834 (*Isis* (Oken): 704) though the description was published by Brandt three years later.

Bernardi: Gervais devait revenir à une synonymie correcte dès 1844, puisque la priorité de son nom était établie par lui-même.

Nye: I would vote in favour of a ruling that *Polyzonium* and *P. germanicum* should be given nomenclatural precedence over *Platyulus* and *P. audouinii* by any person who treats them as congeneric and conspecific respectively but I am not willing to vote for the suppression of subjective synonyms when the desired end can be achieved by the other method.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and Indexes by the ruling in the present Opinion:

audouinianus, Platyulus, Gervais, P., 1837, *Annls Sci. nat. Zool.* (3) vol. 2: 48

audouinii, Platyulus, Gervais, P., 1836 (28 December), *L'Institut* (1) vol. 4 (190): 435

germanicum, Polyzonium, Brandt, 1837 (19 January), *Bull. sci. Acad. imp. Sci. St.-Pétersbourg* vol. 1 (23): 178-179

Platyulus Gervais, P., 1836 (28 December), *L'Institut* (1) vol. 4 (190): 435

Platyjulus Brandt, 1840, *Bull. sci. Acad. imp. Sci. St.-Pétersbourg* vol. 7 (20-22): 327, footnote

Polyzonium Brandt, 1837 (19 January), *Bull. sci. Acad. imp. Sci. St.-Pétersbourg* vol. 1 (23): 178-179

POLYZONIIDAE Newport, G.V., 1844 (May), *Proc. linn. Soc. London* vol. 1: 195.

CERTIFICATE

I hereby certify that the votes cast on Voting Paper (75)9 were cast as set out above, that the proposals contained in that Voting Paper have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1065.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
20 July 1976

OPINION 1066

LYDA ALTERNANS COSTA, 1859, TO BE GIVEN PRECEDENCE OVER *LYDA INANIS* KLUG, 1808 (INSECTA; COLEOPTERA)

RULING. — (1) Under the plenary powers it is ruled that the specific name *alternans* Costa, 1859, as published in the binomen *Lyda alternans*, is to be given precedence over the specific name *inanis* Klug, 1808, as published in the binomen *Lyda inanis*, by any zoologist who regards both names as denoting the same taxon.

(2) The specific name *alternans* Costa, 1859, as published in the binomen *Lyda alternans*, is hereby placed on the Official List of Specific Names in Zoology with an endorsement stating the ruling given under the plenary powers in (1) above, with the Name Number 2586.

(3) The specific name *inanis* Klug, 1808, as published in the binomen *Lyda inanis*, is hereby placed on the Official List of Specific Names in Zoology with an endorsement that it is not to be given priority over the specific name *alternans* Costa, 1859, as published in the binomen *Lyda alternans*, by any zoologist who regards both names as denoting the same taxon, with the Name Number 2587.

HISTORY OF THE CASE Z.N.(S.)1944

An application from Dr Karel Benes (*Prague*) for the suppression of *Lyda inanis* Klug, 1808, was first received on 7 October 1970. It was sent to the printer on 18 March 1971 and was published on 1 May 1972 in *Bull. zool. Nomencl.* vol. 29: 25. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* and sent to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97) as well as to seven entomological serials. No comment was received.

In October 1974 Dr Benes sent in a revised application to take account (a) of the modifications to Articles 23a-b and 79b introduced by the XVII International Congress of Zoology (Monaco, 1972) published in *Bull. zool. Nomencl.* vol. 31: 79-81 and 87-89, and (b) of Dr Nye's comment published in *Bull. zool. Nomen.* vol. 30: 140-141. Notice of the possible use of the plenary powers was given as on the first occasion. Again, no comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76) 1 for or against the proposals set out on p. 121 of *Bull. zool. Nomencl.* vol. 32. At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

Affirmative votes — seventeen (17) received in the following order: Melville, Holthuis, Mayr, Lemche, Eisenmann, Vokes, Willink, Tortonese,

Mroczkowski, Corliss, Rohdendorf, Habe, Bayer, Heppell, Bernardi, Nye, Ride

Negative votes: Sabrosky, Dupuis

Late affirmative votes: Alvarado, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Simpson, Erben, Starobogatov.

Dr. Sabrosky commented: "For a rare species 'of no economic importance', let priority apply".

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List by the ruling given in the present Opinion:

alternans, Lyda, Costa, 1859, *Fauna Reg. Napoli,* Lydidae, page 3, pt. 78, fig. 6

inanis, Lyda, Klug, 1808, *Mag. Ges. naturf. Freunde Berlin,* vol. 2: 278.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 1 were cast as set out above, that the proposals contained in that Voting Paper were duly adopted under the plenary powers, and that the decision so reached, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1066.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
20 July 1976

OPINION 1067

SUPPRESSION OF *DELPHINUS PERNETTENSIS* DE BLAINVILLE, 1817 AND *DELPHINUS PERNETTYI* DESMAREST, 1820 (CETACEA)

RULING (1) The following specific names are hereby suppressed under the plenary powers for the purposes of the Law of Priority but not for those of the Law of Homonymy:

(a) *pernettensis* de Blainville, 1817, as published in the binomen *Delphinus pernettensis;*

(b) *pernettyi* Desmarest, 1820, as published in the binomen *Delphinus pernettyi.*

(2) The specific names suppressed under the plenary powers in (1) (a) and (b) above are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers 1016 and 1017 respectively.

HISTORY OF THE CASE Z.N.(S.) 1974

An application for the suppression of the specific names *pernettensis, Delphinus,* de Blainville, 1817, and *pernettyi, Delphinus,* Desmarest, 1820, was received on 3 June 1971. It consisted of a separate of a paper published on 28 May 1971 in *Beaufortia* vol. 19 (244): 21-25. The Director of the Institute of Taxonomic Zoology, University of Amsterdam, and the Board of Editors of *Beaufortia* kindly gave permission for the paper to be republished in the *Bull. zool. Nomencl.* It was accordingly sent to the printer, with a note of introduction, on 14 January 1974 and published on 31 July 1974 in *Bull. zool. Nomencl.* vol. 31: 44-48. Public notice of the possible use of the plenary powers in the case was given in the same part of the *Bulletin* as well as to the prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* 31: 97) and to mammalogical serials. No comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76) 2 for or against the proposals set out on p. 47 of *Bull. zool. Nomencl.* vol. 31. At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

Affirmative votes — fourteen (14) received in the following order: Melville, Holthuis, Mayr, Lemche, Eisenmann, Vokes, Willink, Tortonese, Corliss, Rohdendorf, Habe, Bayer, Nye, Ride

Negative votes — five (5): Sabrosky, Mroczkowski, Heppell, Bernardi, Dupuis

Late affirmative votes: Alvarado, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Sabrosky: I am opposed to actions by the Commission on *nomina dubia*. The author's careful checking of the type-locality as the Cape Verde Islands removes the threat to *Stenella plagiodon*. Let *pernettensis* and *pernettyi* rest in peace.

Nye: Although I am usually opposed to the suppression of subjective synonyms, this is a case of a *nomen dubium* in a well-worked group and has my support.

Bernardi: Je suis d'accord qu'un *nomen dubium* mérite d'être rejeté et qu'il ne faut pas se livrer à des "intellectual games" sur un *nomen dubium*. Je vote cependant contre parce qu'on ne voit pas dans le texte de van Bree le minimum d'effort tout de même souhaitable pour tenter de déterminer à quelle espèce appartient *pernettensis:* 1° puisqu'il ne s'agit pas de *Stenella plagiodon* absent des îles du Cap Vert j'aimerai savoir avec quelles "several species" il peut être confondu — cela n'est pas abordé; 2° j'aimerai qu'il soit clairement précisé que la figure de Pernetty n'est pas utilisable pour déterminer *pernettensis*. Or, cette figure n'est pas discutée.

Dr. van Bree was twice written to, in May and July 1976, with an invitation to reply to these comments, but he did not answer. It was accordingly decided to issue an Opinion in the terms of the clear majority vote of the Commission, without further delay.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official Index by the Ruling given in the present Opinion:

pernettensis, Delphinus, de Blainville, 1817, *Nouv. Dict. Hist. nat.* vol.9: 154

pernettyi, Delphinus, Desmarest, 1820, *Mammalogie, ou description des espèces de mammifères*. (Agasse), Paris : 513.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 2 were cast as set out above, that the proposals there set forth have been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1067.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
16 September 1976

OPINION 1068

LEPTOSOMATIDAE IN AVES AND NEMATODA: RESOLUTION OF HOMONYMY ARISING FROM SIMILARITY IN THE NAMES OF THE TYPE-GENERA

RULING. — (1) The following names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified:

(a) *Leptosomus* Vieillot, 1816 (gender: masculine), type-species, by subsequent designation by Cabanis & Heine, 1862, *Cuculus discolor* Hermann, 1783 (Name Number 2036);

(b) *Leptosomatum* Bastian, 1865 (gender: neuter), type-species, by original designation, *Leptosomatum elongatum* Bastian, 1865 (Name Number 2037).

(2) The following names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified:

(a) *discolor* Hermann, 1783, as published in the binomen *Cuculus discolor* (specific name of type-species of *Leptosomus* Vieillot, 1816) (Name Number 2588);

(b) *elongatum* Bastian, 1865, as published in the binomen *Leptosomatum elongatum* (specific name of type-species of *Leptosomatum* Bastian, 1865) (Name Number 2589).

(3) The following names are hereby placed on the Official List of Family-Group Names in Zoology with the Name Numbers specified:

(a) LEPTOSOMIDAE Blyth, 1838 (type-genus *Leptosomus* Vieillot, 1816) (Name Number 481) (Class Aves).

(b) LEPTOSOMATIDAE Filipjev, 1916 (type-genus *Leptosomatum* Bastian, 1865 (Name Number 482) (Class Nematoda).

(4) The generic name *Leptosoma* Bonaparte, 1850, an incorrect subsequent spelling of *Leptosomus* Vieillot, 1816, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2077.

(5) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers specified:

(a) LEPTOSOMATINAE O. des Murs, 1860, an incorrect subsequent spelling of LEPTOSOMINAE Blyth, 1838 (Name Number 474);

(b) LEPTOSOMATINI Filipjev, 1916, an incorrect original spelling of LEPTOSOMATIDAE Filipjev, 1916 (Name Number 475).

HISTORY OF THE CASE Z.N.(S.)1975

An application for the resolution of the homonymy between the family-group names LEPTOSOMATIDAE in Aves and Nematoda was first received from Dr. A. M. Sudilovskaia (*Zoological Museum, State University*

of Moscow) and Dr. G. N. Kashin (*Moscow*) on 21 June 1971. Before it was sent to the printer, support was received from Dr. Vladimir E. Flint (*Moscow*). After further correspondence, the application was sent to the printer on 27 August 1974 and was published on 13 January 1975 in *Bull. zool. Nomencl.* vol. 31: 209-211. No comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76)3 for or against the proposals set out on pp. 210-211 of vol. 31 of the *Bulletin of Zoological Nomenclature*. At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

Affirmative votes — eighteen (18) received in the following order: Melville, Holthuis, Mayr, Lemche, Eisenmann, Mroczkowski, Vokes, Sabrosky, Willink, Tortonese, Corliss, Rohdendorf, Habe, Bayer, Heppell, Bernardi, Nye, Ride.

Negative votes — none (0)

Abstained: Dupuis

Late affirmative votes: Alvarado, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Simpson, Erben, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Mayr: Since the type-genus of the avian family is *Leptosomus* (undisputed in the whole current literature), LEPTOSOMATIDAE is clearly in violation of the Code.

Holthuis: Bonaparte (1850, *Conspectus Generum Avium:* 96) used the name "*Leptosoma* Vieill. " in the heading of the genus, and the name "*Leptosomus viridis* Vieill." in the synonymy of the species *Cuculus afer* Gmelin, placed in that genus. Nowhere else in Bonaparte's work is either of those names used. Although it seems most likely that Bonaparte's use of the spelling *Leptosoma* is intentional, this cannot be proven and it therefore has to be treated as an incorrect subsequent spelling of *Leptosomus*. I would therefore suggest deleting in para (4) on p. 211 the words "or unjustified emendation" in the third line. Even if *Leptosoma* Bonaparte, 1850, were an available name (which it is not), it would be invalidated by several senior homonyms, the earliest of which is *Leptosoma* Risso, 1827. [Account has been taken of this comment in drafting the Ruling in this Opinion. R.V.M.]

Dupuis: Le vote ne doit pas intervenir maintenant car les données sont incomplètes. Il existe un *Leptosomatus* Nitzsch, 1829. Si Filipjev a utilisé *Leptosomatus* au lieu de *Leptosomatum* il fallait le souligner. [*Leptosomatus* Nitzsch, 1829, *Obs. de avium arteria carotide communi,* is cited without author, description, indication, or included species and is a nomen nudum. Filipjev did not in fact cite *Leptosomatus*. R.V.M.]

ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Indexes by the Ruling given in this Opinion:

discolor, Cuculus, Hermann, 1783, *Tab. Aff. Anim.* (2nd edit.): 186

elongatum, Leptosomatum, Bastian, 1865, *Trans. linn. Soc. London,* vol. 25: 145

Leptosoma Bonaparte, 1850, *Consp. gen. Avium,* vol. I: 96

LEPTOSOMATINAE O. des Murs, 1860, *Traité gen. ool. ornith.:* 530

LEPTOSOMATINI Filipjev, 1916, *Ezhegodnik zool. Mus.* vol. 21: 64

Leptosomatum Bastian, 1865, Trans. linn. Soc. London, vol. 25: 144

LEPTOSOMIDAE Blyth, 1838, *Mag. nat. Hist.* (2) vol. 2: 421

Leptosomus Vieillot, 1816, *Anal. nouv. ornith. élém.*: 28.

The following is the original reference to a subsequent type-species designation entered on the Official List of Generic Names in Zoology by the Ruling given in this Opinion:

Of *Cuculus discolor* Hermann, 1783, for *Leptosomus* Vieillot, 1816, by Cabanis and Heine, 1862, *Mus. Hein.* vol. 4: 57.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 3 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1068.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 July 1976

OPINION 1069

CORRECTION OF ENTRY IN OFFICIAL LIST OF FAMILY-GROUP NAMES IN ZOOLOGY FOR NAME NUMBER 428 (THRAUPIDAE)

(1) The request to use the plenary powers to suppress all uses of the family-group name THRAUPIDAE (Aves) prior to its use by Wetmore & Miller, 1926, is refused.

(2) The entry for Name Number 428 on the Official List of Family-Group Names in Zoology is hereby corrected to read:

THRAUPIDAE, Cabanis, 1847 (type-genus *Thraupis* Boie, 1826) (Class Aves).

HISTORY OF THE CASE Z.N.(S.) 1976

An application to correct the entry relating to the family name THRAUPIDAE on the Official List was first received from Dr. Kashin (*Moscow*) on 13 May 1971. It was sent to the printer on 8 July 1971 and was published on 1 May 1972 in *Bull. zool. Nomencl.* vol. 29: 28-29. It immediately followed an application by Dr George Steyskal (*c/o U.S. National Museum, Washington, D.C.*) for the correction of the spelling of a number of family-group names, in which it was said that the correct spelling of THRAUPIDAE was THRAUPIDIDAE. Dr Eisenmann, as Chairman of the Standing Committee on Ornithological Nomenclature of the International Ornithological Congress, supported Dr Kashin's proposal but opposed Dr Steyskal's (*Bull.* vol. 29: 197). Dr Lemche (*Bull.* vol. 31: 171-172) proposed that the plenary powers should be used to suppress all uses of THRAUPIDAE prior to Wetmore & Miller, 1926 and was opposed by Dr Eisenmann (*Bull.* vol. 32: 131-133); Dr Lemche replied and the Secretary showed, on the same occasion, that correction of the entry concerned was necessary.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76) 4 for or against Dr Lemche's proposal to use the plenary powers in the present case. The following note was issued with the Voting Paper:

"This case began as an application by Dr Kashin (*Bull.* vol. 29: 28-29) for the author and date of the family-group name THRAUPIDAE (Official List No. 428, Opinion 852) to be corrected from "Wetmore & Miller, 1926" to "Cabanis, 1847". This action, and the placing of certain other names

involved on the Official Index, can be taken without the use of the plenary powers.

"In a paper published at the same time as Dr Kashin's application (*Bull* vol. 29: 26-27), Dr Steyskal pointed out that the correct form of the name in question, under Article 29, is THRAUPIDIDAE. At that time it would have been necessary to use the plenary powers to justify the retention of the spelling THRAUPIDAE; but the Monaco Congress (see *Bull.* vol. 31: 81) added a new section d to Article 29 protecting family-group names that are in general use from change on account of an incorrectly formed stem. Dr Eisenmann (*Bull.* vol. 29: 197) supported Dr Kashin and opposed Dr Steyskal, and later (*Bull.* vol. 32: 131-3) showed that the spelling THRAUPIDAE is covered by the Monaco provision.

"Meanwhile Dr Lemche (*Bull.* vol. 31: 171) in the interests of the stability of Official List entries, opposed Dr Kashin and (*Bull.* vol. 32: 132) Dr Eisenmann. He asked that the plenary powers be used to suppress all uses of the name THRAUPIDAE before that of Wetmore & Miller, 1926. A suggestion by Dr Eisenmann led me to discover (*Bull.* vol. 32: 133) that the entry "THRAUPIDAE Wetmore & Miller, 1926" can only be protected if the plenary powers are further used to suppress the family-group names PROCNIATINAE, EUPHONIINAE, PHOENICOPHILINAE and PITYLINAE, all of Sclater, 1886, so far as present information goes. However, no formal proposition for the suppression of those names is at present before the Commission, and the possible use of the plenary powers to that effect has not been advertised.

"I am therefore calling for a vote on V.P. (76) 4 for a vote for or against the use of the plenary powers in the present case. This, being a procedural vote, can be carried by a simple majority; if carried, the case will have to be re-published and the possible use of the plenary powers advertised. But if the majority vote is against the use of the plenary powers, Dr Kashin's original proposals will be considered to have been approved"

At the close of the Voting Period on 10 May 1976, the state of the voting was as follows:

Affirmative Votes - one (1): Habe

Negative Votes - seventeen (17) received in the following order: Melville, Holthuis, Eisenmann, Mayr, Lemche, Mroczkowski, Vokes, Sabrosky, Willink, Tortonese, Corliss, Rohdendorf, Heppell, Bernardi, Nye, Dupuis, Bayer

Late Affirmative Votes: Alvarado, Brinck

Late Negative Votes: Ride, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Mayr: Correcting authorship to Cabanis, 1847, avoids all the difficulties correctly and perceptively pointed out by the Secretary.

Lemche: I do not want to cause trouble even though I still consider it important to protect the Official Lists.

Vokes: While I agree in principle with Dr Lemche on the need for maintaining the stability of the Official List, I cannot justify to myself the attitude that would say that we are unable to make a mistake.

Bernardi: Utilisons les pleins pouvoirs le moins souvent possible.

Heppell: I see no value in perpetuating errors on the Official Lists and believe that automatic correction without recourse to the plenary powers should be the rule wherever information received subsequent to publication of the Opinion so indicates.

ORIGINAL REFERENCE

The following is the original reference for the changed entry for Name Number 428 on the Official List of Family-Group Names in Zoology: THRAUPINAE Cabanis, 1847, *Archiv Naturges.* Jahrg. 1847, vol. 1: 316.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 4 were cast as set out above, that the proposal to use the plenary powers contained in that Voting Paper has been duly rejected, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1069.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 July 1976

OPINION 1070

CONSERVATION OF *ARCHAEOPTERYX LITHOGRAPHICA* VON MEYER 1861 (AVES)

RULING. — (1) Under the plenary powers it is ruled that the specific name *lithographica* von Meyer, 1861, as published in the binomen *Archaeopteryx lithographica*, is to be given precedence over the specific name *crassipes* von Meyer, 1857, as published in the binomen *Pterodactylus crassipes* by any zoologist who believes that the two specific names apply to the same taxon.

(2) The entry for Name No. 1748 on the Official List of Specific Names in Zoology is hereby corrected to read as follows:

lithographica, *Archaeopteryx*, von Meyer, 1861, *Neues Jahrb. Min. Geol. Pal.* 1861: 578 (specific name of type-species of *Archaeopteryx* von Meyer, 1861) (Class Aves); to be given precedence over *crassipes*, *Pterodactylus*, von Meyer, 1857, by any zoologist who believes that both specific names apply to the same taxon.

(3) The specific name *crassipes* von Meyer, 1857, as published in the binomen *Pterodactylus crassipes*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2590 and with an endorsement that it is not to be used in preference to *lithographica*, *Archaeopteryx*, von Meyer, 1861, by any zoologist who believes that both specific names apply to the same taxon.

HISTORY OF THE CASE Z.N.(S.)1977

An application for the suppression of *Pterodactylus crassipes* von Meyer, 1857 was first received from Dr John H. Ostrom (*Yale University*) on 2 August 1971. It was sent to the printer on 23 September 1971 and published on 1 May 1972 in *Bull. zool. Nomencl.* vol. 29: 30-31. Public notice of the possible use of the plenary powers in this case was given in the same part of the *Bulletin* as well as to the prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97) and to two palaeontological serials.

Dr Nye (*Bull.* vol. 30: 141) proposed that the application should be altered to a request for *lithographica*, *Archaeopteryx*, von Meyer, 1861, to be given precedence over *crassipes*, *Pterodactylus*, von Meyer, 1857, and this was accepted by Dr Ostrom. Dr Eisenmann thought that the application was unnecessary (*Bull.* vol. 31: 114-115) but otherwise took the same view as Dr Nye.

Dr Ostrom's application was supported by Dr Donald Baird (*Princeton University*), Dr Hildegarde Howard (*Los Angeles County Natural History Museum*) and Dr Alexander Wetmore (*Smithsonian Institution*). No adverse comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76) 5 on the proposals set out in *Bull. zool. Nomencl.* vol. 29: 31, as modified in *Bull.* vol. 30: 141. At the close of the Voting Period on 10 May 1976, the state of the voting was as follows:

Affirmative Votes - eighteen (18) received in the following order: Melville, Holthuis, Mayr, Lemche, Eisenmann, Mroczkowski, Vokes, Sabrosky, Willink, Tortonese, Corliss, Rohdendorf, Bayer, Heppell, Bernardi, Nye, Dupuis, Ride

Negative Votes - none (0)

Late Affirmative Votes: Alvarado, Habe, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

Dr Holthuis suggested a wording to replace that proposed in Dr Nye's comment, which has been substantially adopted in the present Ruling.

ORIGINAL REFERENCE

The following is the original reference for a name placed on an Official List by the Ruling given in the present Opinion: *crassipes, Pterodactylus,* von Meyer, 1857, *Neues Jahrb. Min. Geol. Pal.* 1857: 535.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 5 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1070.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 July 1976

OPINION 1071

EMENDATION UNDER THE PLENARY POWERS OF LIOPELMATINA TO LEIOPELMATIDAE (AMPHIBIA SALIENTIA)

RULING. — (1) Under the plenary powers the family-group name LIOPELMATINA Mivart, 1869, is hereby emended to LEIOPELMATIDAE.

(2) The generic name *Leiopelma* Fitzinger, 1861 (gender: neuter), type-species, by monotypy, *Leiopelma hochstetteri* Fitzinger, 1861, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2038.

(3) The specific name *hochstetteri* Fitzinger, 1861, as published in the binomen *Leiopelma hochstetteri* (specific name of type-species of *Leiopelma* Fitzinger, 1861) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2591.

(4) The generic name *Liopelma* Günther, 1868, an unjustified emendation of *Leiopelma* Fitzinger, 1861, is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2078.

(5) The family-group name LEIOPELMATIDAE Mivart, 1869, (emendation under the plenary powers in (1) above of LIOPELMATINA) (type-genus *Leiopelma* Fitzinger, 1861) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 483.

(6) The following names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers specified:

(a) LIOPELMATINA Mivart, 1869 (an incorrect original spelling, by reason of the ruling under the plenary powers in (1) above, of LEIOPELMATIDAE) (Name Number 476);

(b) LIOPELMIDAE Noble, 1924 (a junior objective synonym of LEIOPELMATIDAE Mivart, 1869) (Name Number 477);

(c) LEIOPELMIDAE Turbott, 1942 (a junior objective synonym of LEIOPELMATIDAE Mivart, 1869) (Name Number 478).

HISTORY OF THE CASE Z.N.(S.)1936

An application for the emendation of LIOPELMATINA Mivart, 1869 to LEIOPELMATIDAE was first received from Dr James D. Fawcett and Dr Hobart M. Smith (*University of Colorado*) on 6 August 1970. It was sent to the printer on 26 October 1970 and published on 10 August 1971 in *Bull. zool. Nomencl.* vol. 28: 50-52. Public notice of the possible use of the plenary powers was given in the same number of the *Bulletin* and to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97)

and to a herpetological journal. Dr George Steyskal (*Bull.* vol. 29: 2) pointed out that the correct gender of *Leiopelma* is neuter. Dr Sabrosky (*Bull.* vol. 29: 156-157) proposed that the Code be amended so as to remove the need to use the plenary powers in such cases as the present one. Dr Eisenmann (*Bull.* vol. 31: 10) supported Dr Sabrosky but favoured the use of the plenary powers in this instance.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76)6 for or against the proposals set out on p. 58 of vol. 28 of the *Bull. zool. Nomencl.* At the close of the Voting Period on 10 May 1976, the state of the voting was as follows:

Affirmative Votes — thirteen (13) received in the following order: Melville, Holthuis, Mayr, Lemche, Eisenmann, Vokes, Sabrosky, Willink, Tortonese, Corliss, Rohdendorf, Bayer, Nye

Negative Votes — four (4): Mroczkowski, Heppell, Bernardi, Ride

Abstention: Dupuis

Late Affirmative Votes: Alvarado, Habe, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Sabrosky: I vote in favour of this only because I approve of LEIOPELMATIDAE, but I reiterate my point that such cases should not require action by the Commission but should be answered by the normal operation of provisions of the Code.

Mroczkowski: I agree with Dr. Sabrosky's proposal for an amendment to the Code.

Corliss: Essentially in agreement with colleague Sabrosky. I see no reason to require the Commission's time or powers on such cases. Let the Code permit authors to take care of such obvious cases without resort to a proposal and an Opinion.

Bernardi: J'appuie la proposition de Sabrosky.

Heppell: While taking note of the final sentence of Commissioner Eisenmann's comment, I believe it is better to decline to act in individual cases where a general principle covering such cases is *sub judice.* Although agreeing with the applicants as far as their object is concerned I prefer to support the change in the Code proposed by Sabrosky and extended by Eisenmann.

Dupuis: Je ne vote pas et je demande que l'on examine sérieusement la proposition de Sabrosky. Pour être correct, un texte français devrait être rédigé comme suit: "Un nom du groupe-famille, fondé sur une émendation injustifiée d'un nom du group-genre doit être corrigé conformément à l'orthographe originale du nom émendé, à moins que l'émendation ne soit devenue le nom valide du genre".

Ride: I agree with Dr. Sabrosky's interpretation and that there is no need for action by the Commission. I agree that the Code should be made explicit in this respect.

ACTION BY THE SECRETARY TO COMPLETE THE RULING IN THE PRESENT OPINION

When this Opinion came to be written, it was clear that there was an omission in the proposals put forward by the applicants, and in the case as presented for a vote by the Commission: there was no proposal to place the specific name *hochstetteri* Fitzinger, 1861, as published in the binomen *Leiopelma hochstetteri* (specific name of type-species of *Leiopelma* Mivart, 1869) on the Official List of Specific Names in Zoology. Since the Commission had already voted to place *Leiopelma*, with *L. hochstetteri* as type-species, on the Official List of Generic Names, the placing of the name of that species on the appropriate Official List follows inevitably. I therefore placed a minute to that effect on file No. Z.N.(S.) 1836 and completed the Ruling accordingly.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and Indexes by the Ruling given in the present Opinion:

hochstetteri, Leiopelma, Fitzinger, 1861, *Verh. zool.-bot. Ges. Wien,* vol. 11: 218

Leiopelma Fitzinger, 1861, *Verh. zool. -bot. Ges. Wien* vol. 11: 218

LEIOPELMIDAE Noble, 1924, *Amer. Mus. Novit.* (132): 9

Liopelma Günther, 1868, *Proc. zool. Soc. London* 1868: 478

LIOPELMATINA Mivart, 1869, *Proc. zool. Soc. London* 1869: 291

LIOPELMIDAE Turbott, 1942, *Trans. roy. Soc. N.Z.* vol. 71: 247.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 6 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is, with the additional item minuted by the Secretary, truly recorded in the present Opinion No. 1071.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 July 1976

OPINION 1072
REFUSAL OF REQUEST TO SUPPRESS *HYLA CRUCIALIS* HARLAN, 1826 (AMPHIBIA)

RULING.- (1) The request for the use of the plenary powers to suppress the specific name *crucialis* Harlan, 1826, as published in the binomen *Hyla crucialis*, for the purposes of the Law of Priority but not for those of the Law of Homonymy, is refused.

(2) The specific name *crucialis* Harlan, 1826, as published in the binomen *Hyla crucialis*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2592.

HISTORY OF THE CASE Z.N.(S.) 1982

An application for the suppression of *Hyla crucialis* Harlan, 1826, was first received from Dr Linda Trueb (*University of Kansas*) on 13 September 1971. It was sent to the printer on 23 September 1971 and published on 1 May 1972 in *Bull. zool. Nomencl.* vol. 29: 39-40. Public notice of the possible use of the plenary powers in this case was given in the same part of the *Bulletin* as well as to the prescribed serials (Constitution Art. 12b; *Bull.* 31: 97) and to one herpetological serial. The application was opposed by Dr R.I. Crombie (*National Zoological Park, Washington D.C.*) (*Bull.* vol. 30: 4-6) and supported by Dr M.J. Tyler (*South Australian Museum, Adelaide*), Dr Hobart Smith (*University of Colorado*) and Dr A.M. Grandison (*British Museum, Natural History*).

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three Month Rule on Voting Paper (76)8 for or against the proposal set out in *Bull. zool. Nomencl.* vol. 29: 40. At the close of the Voting Period on 10 May 1976, the state of the voting was as follows:

Affirmative Votes - seven (7) received in the following order: Melville, Mayr, Lemche, Eisenmann, Tortonese, Corliss, Rohdendorf

Negative Votes - eleven (11) received in the following order: Holthuis, Vokes, Sabrosky, Willink, Mroczkowski, Heppell, Bernardi, Nye, Dupuis, Bayer, Ride

Late Affirmative Vote: Brinck

Late Negative Votes: Habe, Kraus

Late Conditional Vote: Alvarado

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Mayr: I found Crombie's comments utterly unconvincing.

Eisenmann: Dr Trueb's proposal seems to fall clearly within the recently amended provisions of Article 79b. There are no requirements (contrary to the assumption of Dr. Crombie) that well known species be involved or that usage is to be determined only by papers that add new data. Faunal check-lists compiling distributional information already published are among the most authoritative works for nomenclature .

Vokes: I must agree with Crombie's last paragraph. Priority must remain when little-used, non-significant names are involved.

Sabrosky: Crombie's remarks are to be commended. The species is not common, important, widely distributed, or either zoologically or economically significant. Further, I am unimpressed by the failure of so many eminent authors to recognize the obvious.

Willink: I agree with Dr. Crombie's comments.

Corliss: Despite Crombie's thought-provoking objection, I believe that the reasons for the obscurity of any senior synonym are beside the point in application of the benignly useful "statute of limitation".

Bernardi: Je suis totalement d'accord avec le point de vue exposé par Crombie.

Dupuis: L'opposition de Crombie repose sur des considérations générales d'une portée très réelle.

Alvarado: I prefer to vote with a majority of the Commissioners, because I found in Dr. Crombie's comment very important questions implying more than the factual case.

Kraus: Together with Crombie I feel that the names in question are too unimportant for the procedure requested by the applicant.

ORIGINAL REFERENCE

The following is the original reference for a name placed on an Official List by the Ruling given in the present Opinion: *crucialis, Hyla,* Harlan, 1826 *Amer. J. Sci. Arts,* vol. 10 (7): 64.

CERTIFICATE

I certify that the votes cast on Voting Paper (76)8 were cast as set out above, that the proposal for the use of the plenary powers contained in that Voting Paper has been refused, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1072.

R.V.MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
27 July 1976

OPINION 1073
VALIDATION OF RIODINIDAE GROTE, 1895 (1827) (LEPIDOPTERA)

RULING.- (1) Under the plenary powers it is hereby ruled that the family name RIODINIDAE Grote, 1895, (type-genus *Riodina* Westwood, [1851] shall have precedence as from 1827.

(2) The family name RIODINIDAE Grote, 1895 (1827), (type-genus *Riodina* Westwood, [1851]) is hereby placed on the Official List of Family-Group Names in Zoology with the Name Number 484.

(3) The generic name *Riodina* Westwood, [1851], (gender: feminine), type-species, by monotypy, *Papilio lysippus* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2039.

(4) The specific name *lysippus* Linnaeus, 1758, as published in the binomen *Papilio lysippus* (specific name of type-species of *Riodina* Westwood, [1851], is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2593.

(5) The family name ERYCINIDAE Swainson, 1827 (invalid because the name of its type-genus is a junior homonym) is hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Number 479.

HISTORY OF THE CASE Z.N.(S.) 1948

An application for the validation of the family name RIODINIDAE Grote in Lepidoptera was first received from Lt.-Col. C.F. Cowan (then of *Little Gaddesden, Herts., England*) on 9 December 1970. It was sent to the printer on 20 September 1972 and published on 29 December 1972 (*Bull. zool. Nomencl.* vol. 29: 206-208). Public notice of the possible use of the plenary powers in this case was given in the same part of the Bulletin as well as to the prescribed serials (Constitution Art. 12b; *Bull.* vol. 31: 97) and to eight entomological serials. The application was supported by Mr. Cyril F. dos Passos.

Lt.-Col. Cowan asked that RIODINIDAE, which was first published by Grote in 1895, should be given precedence over its senior synonyms - all of which are in use at subfamily or tribe level, and the oldest of which dates from 1859 - by being given the arbitrary date of 1851 (the date of the name of its type-genus, *Riodina*). He saw no need to give it the date (1827) of the invalid name ERYCINIDAE Swainson which it replaces. The Secretary, however (*Bull.* vol. 32: 11) thought that the latter course would be more in keeping with the spirit of Article 40 (and of Article 39 before 1964). He proposed not only that RIODINIDAE should be given precedence from 1827, but also that the invalid name ERYCINIDAE Swainson, 1827, be placed on the Official Index.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper 1976(9) for or against the proposals set out in *Bull.* vol. 29: 207-208 and supplemented in *Bull.* vol. 32: 11. At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

Affirmative Votes - seventeen (17), received in the following order: Melville, Holthuis, Mayr, Lemche, Mroczkowski, Eisenmann, Vokes, Willink, Tortonese, Corliss, Rohdendorf, Habe, Heppell, Nye, Dupuis, Bayer, Ride

Negative Vote: Sabrosky

Late Affirmative Votes: Alvarado, Brinck, Kraus.

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

Dr. Nye said on his Voting Paper: "I vote for the original proposals supplemented by placing the rejected name ERYCINIDAE on the Official Index. I vote against antedating RIODINIDAE to 1827 when the date of establishment of the type-genus, [1851], is sufficient."

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the Ruling given in the present Opinion:

ERYCINIDAE Swainson, 1827, *Philos. Mag.* (n.s.) vol. 1: 185
Iysippus, Papilio, Linnaeus, 1758, *Syst. Nat.* (ed. 10): 484
Riodina Westwood, [1851], *Genera of diurnal lepidoptera*, vol. 2 (47): 430
RIODINIDAE Grote, 1895, *Mitt. Roemermus. Hildesheim* (1): 2.

CERTIFICATE

I certify that the votes cast on Voting Paper (76)9 were cast as set out above, that the proposal set out in that Voting Paper has been duly adopted under the plenary powers, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1073.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
3 August 1976

OPINION 1074
MUREX RANA BUBO LINNAEUS, 1758, DESIGNATED AS TYPE-SPECIES OF *TUTUFA* JOUSSEAUME, 1881 (GASTROPODA)

RULING.- (1) Under the plenary powers, all designations of type-species for the nominal genus *Tutufa* Jousseaume, 1881, hitherto made are hereby set aside and the nominal species-group taxon *Murex rana bubo* Linnaeus, 1758, is hereby designated as type-species of that genus.

(2) The generic name *Tutufa* Jousseaume, 1881 (gender: feminine), type-species, by designation under the plenary powers in (1) above, *Murex rana bubo* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2040.

(3) The species-group name *bubo* Linnaeus, 1758, as published in the combination *Murex rana bubo* (specific name of type-species of *Tutufa* Jousseaume, 1881) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2594.

HISTORY OF THE CASE Z.N.(S.) 2021

An application for the use of the plenary powers to designate a type-species for the gastropod genus *Tutufa* Jousseaume, 1881, that would conserve the current interpretation of that name was first received from Dr. R.P. Suggate (*Acting Director, New Zealand Geological Survey*) on behalf of Dr. A.G. Beu on 6 October 1972. It was sent to the printer on 29 January 1973 and published on 6 July 1973 in *Bull. zool. Nomencl.* vol. 30: 54-56. Public notice of the possible use of the plenary powers in this case was given in the same part of the *Bulletin* as well as to the other prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97) and to three malacological serials. A comment by Dr. Harald A, Rehder (*U.S. National Museum, Washington D.C.*) containing revised proposals that had been accepted by Dr. Beu was published on 31 July 1974 in *Bull.* vol. 31: 11-12. No other comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper 1976 (10) for or against the proposals set out on p.56 of *Bull.* vol. 30 and modified on p. 12 of vol. 31. At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

Affirmative Votes - seventeen (17) received in the following order:
Melville, Holthuis, Mayr, Lemche, Mroczkowski, Eisenmann, Vokes, Sabrosky, Willink, Tortonese, Corliss, Rohdendorf, Habe, Heppell, Bernardi, Nye, Bayer

Negative Votes - none (0)

Abstention: Dupuis

Late Affirmative Votes: Alvarado, Ride, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their Voting Papers:

Nye: Surely the type-species of *Tutufa* as in the modified proposals is *Murex rana* Linnaeus. If, as the proposer believes, *bubo* Linnaeus is a valid species and if he considers that it should be the type-species, then it must be designated as "*bubo* Linnaeus, as published in the combination *Murex rana bubo*". Linnaeus, 1758, did not use the term "var." for this taxon. [This comment has been taken into account in drawing up the Ruling in this Opinion. R.V.M.]

Dupuis: Il est impossible de voter maintenant, alors que "there are at least 6 species of *Tutufa* sensu stricto. The nomenclature of some of the species is obscure as yet, particularly the status of the name *Murex rana bubo* Linnaeus, 1758..." (Beu, p.55).

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the Ruling given in the present Opinion:

bubo, Murex rana, Linnaeus, 1758, *Syst. Nat.* ed. 10, vol. 1: 748

Tutufa Jousseaume, 1881, *Bull. Soc. zool. France,* vol. 6: 175

CERTIFICATE

I certify that the votes on Voting Paper (76)10 were cast as set out above, that the proposals set out in that Voting Paper have been duly adopted under the plenary powers and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1074.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
4 August 1976

OPINION 1075

CONSERVATION OF *STRIGLINA* GUENEE, 1877 (LEPIDOPTERA, THYRIDIDAE)

RULING.-(1) Under the plenary powers it is hereby ruled that the generic name *Striglina* Guenée, 1877 is to be given precedence over the generic name *Daristane* Walker, 1859, by any zoologist who believes that both names denote the same taxon.

(2) The generic name *Striglina* Guenée, 1877 (gender: feminine), type-species, by subsequent designation by Whalley, 1964, *Striglina lineola* Guenée, 1877, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2041, with an endorsement that it is to be given precedence over the generic name *Daristane* Walker, 1859, by any zoologist who believes that both names denote the same taxon.

(3) The generic name *Daristane* Walker, 1859 (gender: feminine), type-species, by monotypy, *Daristane tibiaria* Walker, 1859, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2042, with an endorsement that it is not to be given priority over *Striglina* Guenée, 1877, by any zoologist who believes that both names denote the same taxon.

(4) The specific name *scitaria* Walker, 1862, as published in the binomen *Drepanodes scitaria*, is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2595.

(5) The specific name *tibiaria* Walker, 1859, as published in the binomen *Daristane tibiaria* (specific name of type-species of *Daristane* Walker, 1859) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2596.

HISTORY OF THE CASE Z.N.(S.) 2025

An application for the conservation of the generic name *Striglina* Guenée, 1877, by the suppression of the generic name *Daristane* Walker, 1859, was first received from Mr. P.E.S. Whalley (*British Museum, Natural History*) on 22 November 1972. It was sent to the printer on 29 January 1973 and published on 6 July 1973 in *Bull. zool. Nomencl.* vol. 30: 61-62. Public notice of the possible use of the plenary powers in this case was given in the same part of the *Bulletin* as well as to the prescribed serials (Constitution Art. 12b; *Bull.* vol. 31: 97) and to nine entomological serials.

In 1974 Dr. Nye proposed (*Bull.* vol. 30: 140-141) that in this case (and others of the same general sort), it would be better to rule under the plenary powers that the junior synonym should take precedence over the senior synonym than to suppress the senior synonym. In 1975 (*Bull.* 31: 173) Mr. Whalley accepted this suggestion and offered the Commission a choice between his original proposals and a new (and completed) set of proposals based upon Dr. Nye's suggestion. No other comment was received.

DECISION OF THE COMMISSION

On 10 February 1976 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (76) 11 for Alternative A (Mr. Whalley's original proposals in *Bull.* vol. 30: 61-62) or for Alternative B (the proposals in *Bull.* vol 31: 173 on the lines of Dr. Nye's suggestion). At the close of the Voting Period on 10 May 1976 the state of the voting was as follows:

For Alternative A - five (5) received in the following order: Melville, Vokes, Corliss, Rohdendorf, Heppell

For Alternative B - twelve (12) received in the following order: Holthuis, Mayr, Lemche, Mroczkowski, Eisenmann, Sabrosky, Willink, Tortonese, Habe, Bernardi, Nye, Bayer

Abstention: Dupuis

Late votes for Alternative B: Alvarado, Ride, Brinck, Kraus

Leave of Absence: Binder

Voting Papers not returned: Erben, Simpson, Starobogatov.

The following comments were sent in by members of the Commission with their voting papers:

Heppell: There are a number of unsatisfactory aspects to both alternatives of this case. In (A) we are asked to place the specific name *scitaria* on the Official List although nowhere does this name occur in the discussion, reference to Whalley's 1964 type-designation being necessary to elucidate the fact that it is a senior synonym of *lineola*. In (B) we are asked to place *Daristane* and *tibiaria* on the Official Lists alongside *Striglina* and its 'type-species' (presumably *scitaria*, not *lineola*, is intended) even though the application shows the two genera to be subjectively congeneric. The main purpose of the application is to conserve the name *Striglina* and it is unfortunate that, as the Code stands, placement of this name on the Official List does not give it automatic precedence over *Daristane*. In the face of the unsatisfactory alternatives I can only vote against (B) and, consequently, for (A). In principle, however, I endorse Nye's comments on the treatment of such cases as this.

Dupuis: Je vote contre (A) et contre (B) car *Striglina* n'est pas assez 'widely known' pour qu'on enfreigne en sa faveur la règle de priorité. Je rappelle qu'en anglais comme en français il n'y a pas deux alternatives, mais les deux termes d'une alternative.

Bayer: This voting paper makes a vote for one or other alternative mandatory, and provides no opportunity for a negative vote.

Kraus: For reasons of principle I vote for Alternative B as this case also involves taxonomic questions, and Alternative B seems to be in better harmony with taxonomic freedom.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists by the Ruling given in the present Opinion:

Daristane Walker, 1859, *J. linn. Soc. London* vol. 3: 193

scitaria, Drepanodes, Walker 1862, *List of lepidopterous insects in the British Museum* (Brit.Mus.) pt. 26: 1488.
Striglina Guenée, 1877, *Ann. Soc. ent. France* vol. 7: 283
tibiaria, Daristane, Walker, 1859, *J. linn Soc. London* vol. 3: 194.

CERTIFICATE

I certify that the votes cast on Voting Paper (76) 11 were cast as set out above, that the proposals contained in that voting paper have been duly adopted under the plenary powers and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1075.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
9 August 1976

OPINION 1076

REFUSAL OF APPLICATION FOR THE USE OF THE PLENARY POWERS TO SUPPRESS *PROCYON BRACHYURUS* WIEGMANN; 1837 AND *PROCYCON OBSCURUS* WIEGMANN, 1837 (MAMMALIA CARNIVORA)

RULING.- (1) The application for the of the plenary powers to suppress the specific name *brachyurus, Procyon,* Wiegmann, 1837, and *obscurus, Procyon,* Wiegmann, 1837, is hereby refused.

(2) The names mentioned in Clause (1) remain available and are subject to the provisions of the International Code of Zoological Nomenclature, including Article 23a-b.

(3) The specific names *brachyurus, Procyon,* Wiegmann, 1837, and *obscurus, Procyon,* Wiegmann, 1837, are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers 2597 and 2598 respectively, with the endorsement given in clause (2) of this Ruling.

HISTORY OF THE CASE Z.N. (S.) 1640

An application for the suppression of *Procyon brachyurus* Wiegmann, 1837, and *Procyon obscurus* Wiegmann, 1837, was first received from Dr. Charles A. Long (*Department of Zoology, University of Illinois*) on 5 March 1964. It was sent to the printer on 8 May 1964 and published on 16 October 1964 in *Bull. zool. Nomencl.* vol. 21: 318-320. Dr Lemche objected to the references to type-localities in the detailed proposals to the Commission (para 9 of the application). The application was supported by Dr. Hobart M. Smith (then of *Department of Zoology, University of Illinois*) (*Bull.* vol. 22: 16) and opposed by Dr. Philip Hershkovitz (*Chicago Natural History Museum*) (*Bull.* vol. 22: 338).

The Committee on Nomenclature of the American Society of Mammalogists sent the following comment, which was circulated to members of the Commission with their Voting Papers:

"In reviewing Long's proposal for the suppression of the two Wiegmann names for raccoons, the Committee was mindful that they are in a sense nomina dubia. Still in all, in the opinion of the majority, no sound reasons exist for suppressing these two names. No convincing evidence was brought forth by Long that the name *brachyurus* was applied to an Antillean or Bahaman raccoon or that a 'state of confusion' would result if the name was applied to some kind of raccoon. Suppression was asked for the name *obscurus* simply because its 'type-locality is unknown'.

"After weighing the proposal by Long and subsequent comments written by Philip Hershkovitz, five members of the committee voted against suppression of *Procyon brachyurus* and *Procyon obscurus*. The remaining two members saw some merit in Long's proposal, but did not give it their unqualified support." This comment was signed by W.H. Burt, C.O. Handley, Jr., P. Hershkovitz, K.F. Koopman, W.Z. Liddicker, R.L. Peterson and J.K. Jones, Jr., Chairman.

DECISION OF THE COMMISSION

On 16 June 1966 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (1966)35 for or against the proposals set out in *Bull. zool. Nomencl.* vol. 21: 319-320. At the close of the Voting Period on 16 September 1966, the state of the voting was as follows:

Affirmative Votes - five (5) received in the following order: Lemche, Holthuis, Binder, Mayr, Mertens

Negative Votes - fourteen (14) received in the following order: China, Brinck, Boschma, Vokes, Sabrosky, Jaczewski, Obruchev, do Amaral, Uchida, Tortonese, Kraus, Forest, Alvarado, Evans

Late Affirmative Votes: Ride, Stoll, Simpson, Bonnet

Voting Papers not returned: Hubbs, Munroe

The following comments were returned by members of the Commission with their Voting Papers:

Lemche: The two names are obviously nomina oblita and as such do not deserve to be revived. The opponents of the present proposal do not offer any solution to a situation where two scientists would try to apply one of these names each to his own species of *Procyon*. The present proposal has the merit that it will prevent such purposeless discussion.

Jaczeswki: I agree with the objections raised by P. Hershkovitz and the Committee on Nomenclature, American Society of Mammalogists.

Binder: The only way to prevent with certainly a nomen dubium from being used in the future in place of an unequivocal name is to suppress it. There may be other ways to dispose of it in the present case (as a junior synonym, for instance), but these can be challenged. Since the Commission has been given the trouble to deal with the case, it might as well settle it definitively.

Kraus: I vote against the proposal especially because the reasons why the name *obscurus* should be suppressed are not discussed at all.

Mayr: I see no harm in removing these two dubious names from the rank of availability. In their present status they continue to be a potential threat to stability. Admittedly it would have been better never to have bothered the Commission with this case.

Simpson: As Hershkovitz admits, *P. brachyurus* and *P. obscurus* are simply unidentifiable. They may be senior synonyms of several different names. Hershkovitz's discussion does *not* eliminate confusion, and stability *does* require Commission action. Smith's arguments are cogent.

NOTE BY THE SECRETARY

It is not clear why an Opinion was not issued on this case immediately after the completion of the voting. My attention to this lapse was drawn by Dr. Karl. F. Koopman (*American Museum of Natural History, New York*) in a letter dated 8 July 1976.

In examining the file with a view to preparing the ruling in this Opinion, it was clear that the situation concerning these names has been materially altered

by the action of the XVII International Congress of Zoology (Monaco, 1972) concerning Articles 23a-b and 79b. For while it may be inferred from the Commission's decision that the validity of *Procyon brachyurus* Wiegmann, 1837, and *P. obscurus* Wiegmann, 1837, is a matter for zoologists to decide, it is also clear that it would be a contravention of Article 23a-b to give either name validity in such a way as to displace a long-established name in its accustomed meaning. Since both names remain available, it seems prudent to endorse their entries on the Official List with a reference to their position under the Code as it now stands. If this is not done, misunderstandings may arise in the future as to the conditions which limit the potential validity of these names, even though they appear on the Official List.

ORIGINAL REFERENCES

The following are the original references for the names placed on an Official List by the Ruling given in the present Opinion:

brachyurus, Procyon, Wiegmann, 1837, *Arch. Naturges.* vol. 3 (1): 369

obscurus, Procyon, Wiegmann, 1837, *Arch. Naturges.* vol. 3(1): 370.

CERTIFICATE

I certify that the votes on Voting Paper (66)35 were cast as set out above, that the proposal contained in that Voting Paper has been rejected, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1076.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
10 August 1976

OPINION 1077
REFUSAL OF REQUEST TO USE THE PLENARY POWERS TO SUPPRESS THE GENERIC NAME *CYNOCEPHALUS* BODDAERT, 1768 (MAMMALIA)

RULING.- (1) The application for the use of the plenary powers for the suppression of the generic name *Cynocephalus* Boddaert, 1768, is hereby refused.

(2) The generic name *Cynocephalus* Boddaert, 1768 (gender: masculine), type-species, by monotypy, *Lemur volans* Linnaeus, 1758, is hereby placed on the Official List of Generic Names in Zoology with the Name Number 2043.

(3) The specific name *volans* Linnaeus, 1758, as published in the binomen *Lemur volans* (specific name of type-species of *Cynocephalus* Boddaert, 1768) is hereby placed on the Official List of Specific Names in Zoology with the Name Number 2599.

(4) The generic name *Galeopithecus* Pallas, 1783, (a junior objective synonym of *Cynocephalus* Boddaert, 1768) is hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Number 2079.

HISTORY OF THE CASE Z.N.(S.) 1792

An application for the validation of the generic name *Galeopithecus* Pallas, 1783, was first received from Dr. Leigh van Valen (*University of Chicago*), Dr. P.M. Butler (*Royal Holloway College*), Drs M.C. McKenna and F.S. Szalay (*American Museum of Natural History*) and Drs B. Patterson and A.S. Romer (*Museum of Comparative Zoology*) on 20 February 1967. It was sent to the printer on 3 March 1967 and published on 30 June 1967 in *Bull. zool. Nomencl.* vol. 24: 190-191. Public notice of the possible use of the plenary powers in this case was given in the same part of the *Bulletin* as well as to the prescribed serials (Constitution Art. 12b; *Bull. zool. Nomencl.* vol. 31: 97) and to two specialist serials. The application was supported by Dr. W.D.L. Ride (then of *Western Australian Museum*) and Dr. Everett Lindsay (*University of Arizona*). Objections were received from Dr. P. Hershkovitz (*Field Museum of Natural History, Chicago*) (*Bull.* vol. 25: 202), Professor J. Knox Jones (*University of Kansas*), Dr. Th. Haltenorth (*Zoologische Staatssammlung, Munich*), Dr. H.J. Kuhn (*Senckenbergische Anatomie, Frankfurt a.M.*), Professor J.L. Harrison (*University of Singapore*), and the Committee on Nomenclature of the American Society of Mammalogists (*Bull.* vol. 25: 203).

DECISION OF THE COMMISSION

On 15 May 1969 the members of the Commission were invited to vote under the Three-Month Rule on Voting Paper 1969(27) either for or against the proposals set out on p. 191 of vol. 24 of the *Bulletin of Zoological Nomenclature*.

At the close of the Voting Period on 15 August 1969 the state of the voting was as follows:

Affirmative Votes - ten (10), received in the following order: Lemche, Mayr, Bonnet, Vokes, Obruchev, Uchida, do Amaral, Ride, Mertens, Binder

Negative Votes - twelve (12) received in the following order: China, Holthuis, Brinck, Eisenmann, Sabrosky, Simpson, Jaczewski, Melville, Forest, Starobogatov, Alvarado, Kraus

Voting Papers not returned: Munroe, Tortonese. Dr. G. Owen Evans returned a blank voting paper.

The following comments were sent in by members of the Commission with their voting papers:

Sabrosky: First I believe the attitude of mammalogists should be given great weight in judging names of mammals. Secondly, I am unimpressed by the applicants' argument that the flagrant and intentional disregard of Opinion 90 by some of them now justifies its reversal. Thirdly, should not Hershkovitz's proposal have been noted as the alternative to be adopted if the application by van Valen and others is rejected? [The Secretariat took the view that the proposals expressed by Dr. Hershkovitz were the inevitable result of a rejection of the original proposals. R.V.M.]

Simpson: I still believe, as in my 1945 publication cited in this application, that the 1925 effective *minority* decision of the Commission was discreditable. It has nevertheless gone unchanged for 44 years [in 1969] and there is no real doubt that reversing it now would lead to present instability.

STATEMENT BY THE SECRETARY

I am indebted to Dr. Karl Koopman (*American Museum of Natural History, New York*) for drawing my attention to the fact that this application seemed to have lapsed. On examining the file, I could find no reason why the issue of the Opinion should have been delayed and consequently prepared it as promptly as possible.

ORIGINAL REFERENCES

The following are the original references for the names placed on Official Lists and an Official Index by the Ruling given in this Opinion:

Cynocephalus Boddaert, 1768, *Dierkundig Mengelwerk*, vol. 2: 8

Galeopithecus Pallas, 1783, *Acta Acad, Sci. imp. Petropolitanae* vol. 4 (for 1780): 208

volans, Lemur, Linnaeus, 1758, *syst. Nat.* ed. 10, vol. 1: 30

CERTIFICATE

I certify that the votes cast on Voting Paper (69)27 were cast as set out above, that the proposal for the use of the plenary powers contained in that Voting Paper has been duly rejected, and that the decision so taken, being the decision of the International Commission on Zoological Nomenclature, is truly recorded in the present Opinion No. 1077.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature
London
17 August 1976

INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

Minutes of general meeting at the XIX General Assembly of IUBS, Bangalore, India, from 27th September - 2nd October 1976.

The Commission met first on 27th September and daily thereafter. The following were present at all or some of the sessions: Dr. W.D.L. Ride (President) in the Chair, Dr. Bayer, Dr. Bernardi, Dr. Corliss, Dr. Dupuis, Dr. Holthuis, Dr. Nye, Dr. Sabrosky, Dr. Welch, and the Secretary. Apologies were received from Dr. Binder, Dr. Brinck, Dr. Habe, Dr. Heppell, Dr. Kraus, Dr. Lemche, Dr. Mayr, Dr. Mroczkowski and Dr. Tortonese.

1. The following agenda was adopted:
   (1) Nomination of candidates for election to the Commission by the Section on Nomenclature.
   (2) Review of the By-Laws of the Commission.
   (3) The status of microform as publication.
   (4) Any other business.
      (a) Financial support for the work of the Commission.
      (b) Questions of policy concerning the 3rd edition of the Code.
      (c) Format of the *Bulletin*.
      (d) Functions and role of members of the Commission.

2. The President reminded the meeting that it was in his power to make procedural rulings, subject to challenge. Any such challenge, if seconded, would be discussed and voted on. He added that as no proposals for the amendment of the Code or the Constitution had been submitted to the Commission in time for presentation to the meeting, no motions of either kind could be received. Since the meeting was a general meeting under Article 11a of the Constitution, any other business could be considered.

3. *Nominations.*

The President said that the Commission had already agreed that the number of places to be filled should be the same as the number of retiring members, namely five, and stated that it would be well to send two nominations for each place to the Section on Nomenclature. The Council had already decided under Article 3b of the Constitution that the retiring members of the Commission (Kraus, Mayr, Ride, Sabrosky, Simpson) should be considered eligible for re-election. The following additional nominations had been received:

Dr. Karl Koopman (U.S.A. - Mammals) }
Dr. Boris Peshev (Bulgaria - Mammals) } (under Article 4c of the Constitution)
Dr. Walter Bock (U.S.A. - Birds) (presented by Dr. Corliss)
Dr. H.G. Cogger (Australia - Reptiles) (presented by the President)

Dr. V.A. Trjapitzin (U.S.S.R. - Hymenoptera)
Dr. O.A. Scarlato (U.S.S.R. - Mollusca)
Dr. J.H.O. Day (S. Africa - Polychaetes)
Dr. J.A.J. Meester (S. Africa - Mammals)
Dr. H.E.P. Paterson (S. Africa - population genetics)
Dr. B.R. Stuckenberg (S. Africa - Diptera)
} presented by the Secretary

As the President had been nominated for re-election, it was agreed that the preparation of the slate of 10 nominees should be conducted under the chairmanship of Dr. Holthuis, Vice-President of the Commission.

4. Discussion of the nominations then began. It was agreed that five pairs of names should be presented, from each of which the Section on Nomenclature could elect one. It was further agreed that each pair should bring together, as far as practicable, candidates of similar specialities, so as to preserve the disciplinary balance of the Commission, and that the Commission should indicate its preference for one member of each pair (though this preference would in no way limit the freedom of choice of the Section on Nomenclature). The names of candidates who were already members of the Commission would be indicated by an asterisk. On a motion by Dr. Sabrosky, seconded by the Secretary, it was agreed as a matter of policy not to nominate candidates aged over 60 for election as new members of the Commission.

5. Dr. Ride and Dr. Sabrosky then withdrew while their cases were considered and Dr. Holthuis took the chair. It was decided that the first two pairs of nominees should be:

(1) Sabrosky : Stuckenberg
(2) Ride : Meester

6. The President then resumed the Chair. He informed the Commission of correspondence between himself and Professors Simpson and Mayr which he had initiated in view of the fact that neither, if elected, would be able to serve a full term. Noting this, and in view of the fact that Professor Simpson would reach the age of retirement in only one year, the Commission decided to nominate only Kraus and Mayr of the other retiring members. The meeting then proceeded to prepare the remaining three pairs of names by elimination, with the following result:

(3) Kraus : Trjapitzin
(4) Mayr : Bock
(5) Cogger : Koopman

These decisions were re-examined and ratified at a later meeting and were forwarded to the Section on Nomenclature.

7. *Review of By-Laws.*

The President read out the definition of the By-Laws in Article 17 of the Constitution and explained that votes on matters connected with them would not be votes on matters of zoological nomenclature under Article 12 of the Constitution. In consequence, amendments to the By-Laws could be adopted and put into operation during the present meeting. Dr. Sabrosky was asked to choose the members of a small working party to examine the existing By-Laws and a draft revision prepared by the Secretary, and to produce a new draft.

8. The meeting then began a consideration of the By-Laws in order to identify the problems to which Dr. Sabrosky's working party would need to give

particular attention. These were listed as:-

I. *Commissioners : Nominations and Elections*
   1. Possible different treatment for early interim and late interim vacancies.
   2. Clarification of nomination by individuals (now implied) as well as by institutions and organisations (now provided for).
   3. Provision in duties of Secretary for verification of essential data submitted for nominees, before submission to Commission.
   4. Critical review of questions of national representation [cf. I.A. (b) and (d)]

II. *Officers and Council*
   1. Review of method of election of officers (President and Vice-President), presently unwieldy.
      a) Use of experience of the retiring members of Council?
      b) Permissible re-election of President?
      c) Discontinuance of automatic re-election of past-President and substitution of some other system for continuity?
      d) Clarification of succession of V.P. to Presidency.
      e) See III(2) below.
   2. Voting by Councillors.
   3. See III(4) below.

III. *Secretariat*
   1. Retention of possibility that Secretary might not be a Commissioner.
   2. Should the Secretary, if a Commissioner, also be a Councillor?
   3. Should the Secretary also be Secretary of the Council?
   4. Should the President keep the Secretary informed of Council business? (Possibly solved by answer to No. 2 or No. 3).
   5. Evaluate III.B.4 of By-Laws and re-draft to make it more meaningful. (3 possible reports: to Council, IUBS and Commission).

9. At a later session, the Commission considered and, on a motion by Dr. Bayer, seconded by Dr. Sabrosky, unanimously adopted the revised By-Laws. The Secretary was instructed to circulate the new By-Laws, so adopted, to all members of the Commission, drawing attention to the right of any member to propose amendments to be voted upon by the Commission in a postal ballot. Any amendment, so proposed, seconded, and carried by a simple majority, would replace the existing provision - otherwise the By-Law adopted at Bangalore would stand. Drs. Bernardi and Forest would prepare a French text of the revised By-Laws.

10. Under the new By-Law IIB the Commission resolved, on a motion by Dr. Holthuis, seconded by Dr. Bayer, that the date of election of the next President, Vice President and two new members of Council should be 3 October 1977, so that the Secretary should seek nominations on 3 July 1977. Either, or both, of these dates could be varied by the Council at the request of the Secretary if proposals to amend the By-Laws were not fully resolved by that time.

11. The Commission noted that the electoral provisions for the President, Vice President and Council in the new By-Laws were adopted to provide for continuity in the work of the Council. The Secretary was instructed to prepare

consequential amendments to the Constitution to the extent necessary to achieve this object and to present them to the Council. These would be dealt with by the Commission for presentation to the Section on Nomenclature at the next General Assembly.

12. *Financial support for the work of the Commission.*

The Commission noted with pleasure the successful completion of the negotiations between the Secretary and IUBS on finding new sources of financial support for the work of the Commission. It recorded its special gratitude to the United States delegation for having proposed a motion, eventually adopted as a Resolution by the General Assembly of IUBS, whereby all member countries of IUBS were urged to subscribe annually to the Commission, on a voluntary basis, sums calculated on the same formula as that used for IUBS dues, but based on a unit figure of $16.00.

13. *Format of the* Bulletin; *role of members of the Commission.*

These subjects, which had been placed on the agenda at the request of M. Dupuis, were not discussed, since he was unable to be present to introduce them. The President formally adjourned the meeting on Saturday 2 October at 10.30 a.m.

The Editorial Committee on the 3rd edition of the Code and its Glossary Working Party met under the chairmanship of the President on 2, 3, 4 and 5 October, with valuable assistance from those members of the Commission who remained in Bangalore. Complete drafts of the Code and the Glossary were available for study and much useful new work was done on them. The results, insofar as they entail alterations to the Code and Glossary, will be submitted to the Commission in due course.

R.V. MELVILLE
Secretary
International Commission on Zoological Nomenclature,
London, 7 October 1976.

Minutes of the Section on Nomenclature of the Division of Zoology of IUBS, Bangalore, India, 29 September 1976

The Section met at 14.00 hrs. Dr. J.O. Corliss was voted into the Chair.

1. The Chairman said that the only business before the Section was the election of members of the International Commission on Zoological Nomenclature. The slate of nominees presented by the Commission was as follows:-

1.	*Sabrosky	:	Stuckenberg
2.	*Ride	:	Meester
3.	*Kraus	:	Trjapitzin
4.	*Mayr	:	Bock
5.	Cogger	:	Koopman

(Those marked with an asterisk were retiring members of the Commission.) The Commission had expressed a preference for the candidates listed in the left-hand column of the table, but the Section could vote freely for either member of each pair.

2. The five candidates recommended by the Commission were duly elected by 12 votes to none, with no abstentions. The Secretary was instructed to communicate the result to the President of the Divison of Zoology, and the meeting was adjourned at 15.00 hrs.

R.V. MELVILLE
Secretary
London, 7 October 1976.

The Division of Zoology, meeting immediately after the Section on Nomenclature under the chairmanship of Dr. Farner, and acting as successor in authority to the International Congress of Zoology, ratified the elections made to the Commission.

R.V.M.

AMENDMENTS TO AN APPLICATION FOR THE DESIGNATION OF A TYPE—SPECIES UNDER THE PLENARY POWERS FOR *DRUPELLA* THIELE, 1925 (GASTROPODA). Z.N.(S.)1891

By W.O. Cernohorsky (*Auckland Institute and Museum, Auckland, New Zealand*)

Since the original publication of application Z.N.(S.)1891 five years ago (*Bull. zool. Nomencl.* vol. 26: 233), further information pertinent to this case has come to light which necessitates amendments to the original application. I am grateful to Dr Harald A. Rehder (*U.S. National Museum of Natural History*) for drawing attention to certain defects in that application and for supplying me with specimens of *Purpura ochrostoma* Blainville, 1832, from which it has been possible to establish the proper systematic position of that species.

Thiele (1925, p. 171) established the genus *Drupella* for a group of Thaidine species in the family MURICIDAE. The four originally included species comprised *Purpura elata* Blainville, 1832, *Ricinula spectrum* Reeve, 1846, *Sistrum ochrostoma* (Blainville, 1832, as *Purpura ochrostoma*) and *Ricinula siderea* Reeve, 1846, but Thiele failed to designate a type-species for his new genus *Drupella*.

2. The earliest subsequent type-designation is that by v. Ihering and Haas (1927: 215). In a review of Thiele's 1925 publication, the authors designated *Ricinula siderea* Reeve, as the type-species of *Drupella*.

3. The application for setting aside v. Ihering and Haas's type-designation is based on the grounds of misidentification of the type-species by Thiele, which makes it obligatory to seek a ruling from the Commission under Article 70 of the Code of I.C.Z.N. The dentition figured by Thiele (*loc. cit.*: 171, text-fig. 3) for "*Ricinula siderea* Reeve" is actually the radula of the muricid species *Drupa cornus* Roeding, 1798, whereas the true *Ricinula siderea* Reeve not only belongs to a different genus but also a different family and superfamily. Tryon(1880: 190) and the writer in his original application erroneously presumed that *R. siderea* Reeve belongs to the COLUMBELLIDAE, but recent examination of the three syntypes of *R. siderea* and the radular anatomy of living specimens, shows conclusively that *R. siderea* Reeve belongs to the genus *Engina* Gray, 1839, in the family BUCCINIDAE (Cernohorsky, 1975).

4. If v. Ihering and Haas's type-designation were allowed to stand, *Drupella* Thiele would disappear in the synonymy of *Engina* Gray, in the family BUCCINIDAE, and the creation of a new genus for the muricid *Drupella* group of species would be necessary in view of the absence of available synonyms. From the species originally included in *Drupella* by Thiele, in conjunction with the illustrated dentition of two of the species, it

is quite clear that *Drupella* was meant for a genus in the MURICIDAE and not BUCCINIDAE.

5. In the best interests of nomenclatural stability and in order to preserve *Drupella* in its accustomed sense, it would be most appropriate to set aside v. Ihering and Haas's type-designation and select *Purpura elata* Blainville, 1832 (p. 207), as the type-species of *Drupella* Thiele. *P. elata* Blainville, 1832, is a synonym of the widely distributed, common tropical Indo-Pacific species *Drupa cornus* Roeding, 1798. *Purpura elata* is one of the originally included species, the dentition is of the *Drupella* pattern and the selection of this species would safeguard usage in its accustomed sense. In the original application the selection of *Purpura ochrostoma* Blainville, 1832, as the type-species of *Drupella* has been requested. However, recent examination of the radular anatomy of this species shows that *P. ochrostoma* actually belongs in the Muricid genus *Morula* Schumacher, subgenus *Cronia* H. & A. Adams, 1853, and bears no close relationship within the family to *Drupella.* The type-selection of *P. ochrostoma* is clearly unsuitable and its effect would be a disappearance of *Drupella* in the synonymy of *Morula* Schumacher. Apart from the species already discussed, the fourth species included by Thiele in *Drupella* is *Ricinula spectrum* Reeve, 1846, which is another synonym of *Drupa cornus* Roeding, 1798.

6. In the interests of nomenclatural stability and to obviate the need for a new genus-group name, the International Commission on Zoological Nomenclature is accordingly requested under the provisions of Article 70(a) of the Code:

(1) to use its plenary powers to set aside all designations of type-species for the genus *Drupella* Thiele, 1925, made prior to the present ruling, and, having done so, designate *Purpura elata* Blainville, 1832 (a synonym of *Drupa cornus* Roeding, 1798) as the type-species of *Drupella* Thiele, 1925;

(2) to place the generic name *Drupella* Thiele, 1925 (gender: feminine), type-species by designation under the plenary powers in (1) above, *Purpura elata* Blainville, 1832, on the Official List of Generic Names in Zoology;

(3) to place the specific name *cornus* Roeding, 1798, as published in the binomen *Drupa cornus*, on the Official List of Specific Names in Zoology.

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COTYLE BOIE 1826 (AVES, HIRUNDINIDAE): REQUEST FOR SUPPRESSION Z.N.(S.)2117

By R.K. Brooke (*Durban Museum, Smith Street, Durban, 4001, Republic of South Africa*)

Cotyle Boie (1826: 971 - not seen) has not been used since 1890 as a generic name for a group of species including its type-species *Hirundo fucata* Temminck. It was abandoned on the theory of homonymy with *Cotile* Boie, 1822, (which is an objective junior synonym of *Riparia* Forster, 1817) under the former one letter rule or as an unjustified emendation of *Cotile*. *Cotyle* is thus available, but a powerful case exists for its suppression not only under Articles 23 (a-b) and 79 (b) but also because of the substantial confusion and disturbance of stability that its revival would cause.

2. Sharpe & Wyatt (1894: xlviii) state that Boie designated *Hirundo fucata* Temminck (1822: pl. 161) as the type-species of his new genus *Cotyle*, as discussed in Brooke (1974). Even if Boie did not designate a type-species for *Cotyle* as we now understand the act, Sharpe & Wyatt (*op. cit.*) did designate one in 1894. In 1903 Ridgway (1903: 106) proposed *Alopochelidon* with type-species *Hirundo fucata* Temminck. Ridgway's name is thus an objective junior synonym of *Cotyle* Boie, 1826, irrespective of whether Boie or Sharpe & Wyatt designated its type-species. Some authors had placed Temminck's *H. fucata* in *Atticora* Boie, 1844, with type-species *Hirundo fasciata* Gmelin, but after Ridgway's proposal this placing gradually fell away and for over 50 years (see below) *fucata* has been referred to *Alopochelidon*. The last time that *fucata* was referred to *Cotyle*, whether in its correct sense or as an unjustified emendation of *Cotile*, was by Stempelmann & Schulz (1890: 400).

3. It must be appreciated that *Cotyle* Boie, 1826, is not *Cotile* Boie (1822: 500) with type-species *Hirundo riparia* Linnaeus (1758: 192) by monotypy. *Cotile* is a junior objective synonym of *Riparia* Forster, (1817: 17), a much mentioned genus in the literature of the Aves. *Cotile* is not a classical word though *cotilum* is a rare Greek word for sexual organs. *Cotyle* is a Greek word meaning a little cup or depression and was used by ancient writers for the suckers on the tentacles of octopuses (Cephalopoda, Mollusca). Why anybody thought the latter name appropriate for a member of the avian family HIRUNDINIDAE I do not know. The first author to use *Cotyle* after its proposal was C.L. Brehm (1831: 142) who used it in the binomina *Cotyle fluviatilis* sibi, a subjective synonym of *H. riparia* L., and *Cotyle riparia*. Thereafter, *Cotyle* was used intermittently for a hundred years for *Cotile* Boie, 1822 (= *Riparia* Forster, 1817) by those who considered that the emendation was justified either on the grounds of classical etymology or to avoid the suspicion of obscenity. Some of these

authors did include *H. fucata* in *Cotyle* in their sense but I have found no evidence that anybody has ever used *Cotyle* in its correct sense since its proposal.

4. *Alopochelidon fucata* is a well-established binomen in the literature — see Wetmore, 1926: 342; Naumburg, 1930: 319; Chapman, 1931: 105; Hellmayr, 1935: 48; Pinto, 1944: 316; Zimmer, 1955: 16; Peters, 1960: 92; Cuello & Gerzenstein, 1962: 140; Meyer de Schauensee, 1964: 301, 1966: 396. Other references could be cited, but this seems unnecessary in a case where current usage is unequivocally established. The last occasion before 1975 (see below) when the species was referred to any other genus was when Chubb (1921: 348) used the binomen *Atticora fucata*.

5. Recently, however, Short (1975: 287) has proposed that *H. fucata* Temminck be placed in *Stelgidopteryx* Baird, 1858. The type-species of this genus is *Hirundo serripennis* Audubon, 1838, by monotypy. The effect of this proposal — which I accept as taxonomically sound — is to sink *Alopochelidon* as a junior subjective synonym of *Stelgidopteryx* (which is, in its own right, a well-established name in New World ornithology). It is obviously too soon to say whether Short's proposal will gain general acceptance, but that question does not affect the main purpose of this proposal, which is to ensure that, whatever name is used for the genus containing *Hirundo fucata* Temminck, it shall not be *Cotyle* Boie, 1826. The confusion arising from the revival of *Cotyle* would be increased by its peculiar history, since most authors have treated it as an emendation (justified or unjustified) of *Cotile* rather than as a nominal genus with its own type-species. I therefore take the somewhat unusual step of asking for the suppression of one generic name without asking for its junior synonym to be placed on the Official List.

6. I therefore ask the Commission:

(1) to use its plenary powers to suppress the generic name *Cotyle* Boie, 1826, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic name *Cotyle* Boie, 1826, as suppressed in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

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REQUEST FOR THE CONSERVATION OF *RANA SPHENOCEPHALA* COPE, 1886, AND THE SUPPRESSION OF *RANA UTRICULARIUS* HARLAN, 1826 AND *RANA VIRESCENS* COPE, 1889 (AMPHIBIA: SALIENTIA). Z.N.(S.)2141

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For nearly a hundred years herpetologists have recognized two forms of leopard frogs (*Rana pipiens* complex) in eastern North America. During most of the period since the beginning of this century each of these forms had a relatively stable nomenclature. The northerly distributed form has been referred to as *R. pipiens* Schreber, 1782 (or *R. pipiens pipiens*), and the form with a more southern distribution has been known as *R. sphenocephala* Cope, 1886 (or *R. pipiens sphenocephala*). Recent evidence (Littlejohn and Oldham, 1968; Brown and Brown, 1972; Brown, 1973; Mecham, Littlejohn, Oldham, Brown and Brown, 1973) indicates that the two forms are reproductively isolated from each other, being particularly well differentiated in their species-specific mating calls (an important isolating mechanism in anuran amphibians). Although the two species are similar in appearance, they can be distinguished by a combination of morphological characteristics (Mecham et al., 1973), but not by features of their vocal sacs. The revelation that the two forms are distinct species did not disrupt nomenclatural stability since herpetologists have long been familiar with the names *R. pipiens* and *R. sphenocephala*. More recently, however, Pace (1974) proposed an unwarranted and disruptive resurrection of the forgotten name *R. utricularius* Harlan, 1826 (emended to *R. utricularia*), for the more southerly distributed species. Since the stability of the nomenclature of this complex is of great importance to biologists of many disciplines, we here develop an alternate proposal that the name *R. sphenocephala* be conserved for the southerly distributed species, and that the names *R. utricularius* and *R. virescens* Cope, 1889, be suppressed.

2. The first name applied to the species with a southern distribution was *R.aquatica* Catesby, 1743. This name was pre-Linnean and thus lacks legal status. Kalm (1761) provided the name "*Rana virescens plantis tetradactylis*...", the first two words of which were applied by some later workers as a second name for southern frogs. Since Kalm's (1761) name was not a binominal or trinominal, it lacks availability. Nevertheless, in 1782 Schreber described *R. pipiens* and listed "*Rana virescens*, ..." as a

synonym. However, "A name first published as a synonym is not thereby made available..." (Art. 11d, International Code of Zoological Nomenclature, 1964, p. 11). [The first usage of the name in conformance with the requirements for availability appeared in Cope (1889, p. 397), to which we return hereinafter.] S. Garman (1884) also listed the name "*R. virescens* Kalm" but provided no description. A third name, *R. oxyrhynchus*, was given to leopard frogs from near the St. John's River, Florida, by Hallowell, 1857 (no types designated). That name, however, was preoccupied by an African species. This led Cope (1886) to propose a fourth name, *R. h.* [*alecina*] *sphenocephala*, as a replacement name for Hallowell's *R. oxyrhynchus* (*R. halecina* Daudin, 1802, is a junior synonym of *R. pipiens*). Art. 72d requires that the types of *R. oxyrhynchus*, however determined, constitute the types of the replacement nominal taxon. The replacement name does not date from 1889 as indicated by Pace (1974, p. 18). However, the first *description* for the name *sphenocephala* was given by Cope in 1889 under the combination *R. virescens sphenocephala* (no types designated). He also indicated that *R. v. sphenocephala* was distributed in Florida, Georgia, Louisiana, and other states. The name *virescens* was soon ignored in later works (because it was thought to be a junior synonym of *R. pipiens*), and the name *sphenocephala* (as either *R. p. sphenocephala* or *R. sphenocephala*) became firmly established as a name for the more southerly distributed species in the eastern United States. A great many subsequent herpetological publications utilized *sphenocephala*, the most influential being: all editions (1st - 6th) of "A Check List of North American Amphibians and Reptiles" (Stejneger and Barbour, 1917, 1923, 1933, 1939, 1943; Schmidt, 1953); Dickerson (1906); Noble (1931); A.A. Wright and A.H. Wright (1933, 1942); A.H. Wright and A.A. Wright (1949); Conant (1958); Mecham et al. (1973); and Nace, Culley, Emmons, Gibbs, Hutchison and McKinnell (1974). The name *sphenocephala* was also used in a variety of disciplines and types of publications (e.g., Andrewartha and Birch, 1954; Cochran and Goin, 1970; Comstock, 1939; Cott, 1957; Cuellar, 1971; Foote, 1952; Goin and Goin,1971; Herald, 1949; Kudo, 1954; Mecham, 1969; Minckley, 1963; P.W. Smith, 1961; Thorson and Svihla, 1943). Many embryologists, physiologists, biochemists and other experimental biologists are familiar with the name *sphenocephala* because leopard frogs are among the most frequently utilized animals for experimental research in the United States. To have *sphenocephala* (which has remained stable as a name for the southerly distributed species for over fifty years) replaced by any other name would be highly confusing to non-herpetologists and even to herpetologists who are not taxonomically oriented. Consequently, it is of far reaching importance that the stability of nomenclature be served by conserving the long entrenched name *R. sphenocephala*.

3. In 1826 Harlan described *R. utricularius* (no types designated) for leopard frogs from Pennsylvania and New Jersey. Although he utilized the name in two subsequent publications (Harlan, 1827-1829; 1835 [this

publication represents reprints of Harlan's earlier papers]) it never became widely accepted and (until Pace, 1974) was used as a senior synonym in only two other publications (Boulenger, 1882; H. Garman, 1892). Pace (1974, p. 21) stated that a third reference used *R. utricularia:* "... Günther (1900) used the name for Mexican leopard frogs...". She misinterpreted Günther (1900) since he clearly indicated (p. 198) that *R. utricularia* is a junior synonym of *R. halecina* (= *R. pipiens*). We have completed an extensive examination of the literature and we are quite certain that the name *utricularia* was not used as a senior synonym during the fifty years between 1924 and Pace's 1974 publication. This forgotten name was never even listed in The Zoological Record in any of the years of its publication. Nonetheless, Pace (1974) felt it necessary to revive *R. utricularia* to replace the well established name *R. sphenocephala.* She also designated neotypes for both nominal taxa. The sole justification for these actions was based on her contentions about vocal sac structure. She maintained that she could distinguish *R. utricularia* from *R. pipiens* by the large external vocal sacs of the former and lack of external vocal sacs in the latter. Moreover, she felt that Harlan (1826) differentiated *R. utricularius* from *R. halecina* (= *R. pipiens*) in the same manner. If this was true, then *R. utricularius* Harlan, 1826, would have priority over *R. sphenocephala* Cope, 1886. Pace (1974, p. 12) stated "He [Harlan] named it *Rana utricularius*... because of the large balloon-like external vocal sacs by which he distinguished it from *Rana halecina*." A careful reading of Harlan's (1826) species description does not substantiate this claim. Harlan's only references to vocal sacs in *R. utricularius* were: (1) p.60, "a vocal vesicle on each side of the neck", and (2) p. 61, "a greenish vocal bladder extending on each side of the inferior jaw and crossing the arms in the male". Furthermore, in his description of *R. halecina* (1826, p. 61-62), Harlan made no mention of vocal sacs nor did he mention the sex of the animal he described. The specimen could have been a female, juvenile, or male collected out of breeding condition, all of which lack external vocal sacs. Thus, Harlan (1826) did not compare *R. halecina* and *R. utricularius,* and he did not even mention that his *R. utricularius* had large vocal sacs. Pace read things into Harlan's (1826) descriptions that are not there.

4. We have examined a great many living and preserved specimens of *R. pipiens* and the southern species from many parts of their ranges. It is quite clear that preserved and living males of both species in breeding condition have internal vocal sacs and enlarged external vocal sacs. Other workers that were aware of the differentiation of the two forms (e.g., Conant, 1958; Wright and Wright, 1942) have also noted the enlarged external vocal sacs of *R. pipiens.* Even Pace (1974) indirectly admitted the presence of external vocal sacs in *R. pipiens*, but she referred to them as stretched skin. We have seen many *R. pipiens* with external vocal sacs crossing the arms in the exact manner that Harlan (1826) described for the vocal sacs of his *R. utricularius.* Therefore it is equally likely that Harlan

(1826) utilized male *R. pipiens* for his species description of *R. utricularius*. This explanation was offered earlier by Hallowell (1857, p. 142): "Both authors [Duméril and Bibron; Holbrook] quote among the synonyms of halecina [= *R. pipiens*], the Rana utricularia of Harlan, which is the male halecina with distended vocal vesicles".

5. Another fallacy in Pace's (1974) interpretation of Harlan's papers (1826, 1827 - 1829, 1835) concerns geographical distributions. In these publications the distribution Harlan gave for *R. utricularius* (Pennsylvania and New Jersey) encompassed the edges of the ranges of both *R. pipiens* and the southern species (see figs. 1 and 4, Pace, 1974). In 1827-1829 and 1835 Harlan stated that *R. halecina* inhabited Pennsylvania and southern states. It is thus obvious that Harlan considered *R. halecina* to be the correct name for the southern species. Pace (1974, p. 12) attempted to salvage Harlan's confusion by stating: "the frog illustrated in general herpetology works of the day (e.g., Shaw, 1802) was the northern leopard frog, while the one discussed in those same works was often the southern one". Again, this statement is not substantiated by examination of Shaw's (1802) publication. Most of the description Shaw (1802) gave for the southern species (which he called *R. pipiens*) was taken almost verbatim from Catesby's (1743) description of *R. aquatica* (pre-Linnaean). However, the leopard frog Shaw (1802) illustrated was not the northern species as maintained by Pace (1974). Rather, Shaw's (1802) illustration is almost an exact mirror image of the drawing of *R. aquatica* (= the southern species) presented by Catesby (1743). Both drawings are almost exactly the same size but in Shaw's (1802) figure the pitcher plant was eliminated. Catesby's (1743) frog has narrow light green rings around the spots (quite similar to the condition frequently found in *R. sphenocephala*). Since Shaw's (1802) frog was not coloured, the rings are white and the contrast is much greater, making the spot rings appear somewhat more like the condition in *R. pipiens*. Both frogs most certainly represent the southern species since they both have pointed snouts, lack snout spots, and are mirror images of one another. It is the method of reproduction of Shaw's (1802) figure that makes the spot rings appear more prominent and thus somewhat more like the condition in *R. pipiens*. At the most, Shaw's (1802) figure might be interpreted as being a composite. Hence it is again obvious that another premise that Pace (1974) used in support of her resurrection of *R. utricularia* is unmistakably erroneous.

6. Thus, for a number of reasons we can conclude that it is clear that the name *R. utricularius* is an unquestionable nomen dubium, unless it is construed that Pace's (1974) arbitrary fixation of a neotype also fixes the name. Aside from that arbitrary decision, which was grossly ill-advised from the standpoint of nomenclatural stability, the name is of uncertain

allocation. In addition the name was an "unused senior synonym" in the most recent sense of the Code, as stated in 1974 (I.C.Z.N., *Bull. zool. Nomencl.*, 31: 87-89)., Pace revived the name either in ignorance of the proper nomenclatural procedure, or under the assumption that substitution of *utricularia* for *sphenocephala* would not, in her judgment, "disturb stability or universality or cause confusion" (I.C.Z.N., loc. cit., p. 81). We have already provided documentation in the preceding discussion for the view here advanced that Pace's (1974) proposed change would emphatically and overwhelmingly disturb stability and universality, and cause confusion.

7. Pace (1974) recognized two subspecies of *R. utricularia*. She assigned *R. u. sphenocephala* to peninsular Florida and *R. u. utricularia* to the rest of the range of the species. Her restriction of the name *sphenocephala* as a subspecies to peninsular Florida did very little to preserve the depth and breadth of the entrenchment of that name. Peninsular Florida is a rather small area when compared to the total range of the southerly distributed species. Former researchers associated the name *sphenocephala* with a frog having a much wider distribution. Furthermore, most researchers utilize specific names without subspecific designations. Thus, *sphenocephala* would be guaranteed obscurity if utilized only at a subspecific level.

8. In distinguishing *R. u. sphenocephala* from *R. u. utricularia*, Pace (1974, p. 24) indicated that for the former subspecies: "Juveniles and adults of both sexes are often very dark dorsally and ventrally (Duellman and Schwartz, 1958) ...". This was a complete misrepresentation of Duellman and Schwartz's (1958) comments. Their study was confined to only the extreme southern tip of peninsular Florida and the Florida Keys. In describing leopard frogs from the Everglades and surrounding area they did not indicate that the frogs had very dark dorsal surfaces. Furthermore, they stated (p. 256): "The undersurfaces are white or cream ... The above description is adequate for most specimens from the mainland ...". Duellman and Schwartz (1958) only indicated that darker dorsal and ventral surfaces were characteristic of leopard frogs from islands off the coast of southern Florida. Other features Pace (1974) used to characterize *R. u. sphenocephala* ("textured" vocal sacs, Mullerian ducts present in males, inwardly folding vocal sacs, large size) by her own admission (and confirmed by our examination of specimens in the Florida State Museum) distinguish only some of the peninsular Florida leopard frogs from her *R. u. utricularia*. We thus conclude that *R. u. utricularia* and *R. u. sphenocephala* cannot be adequately differentiated and that the designation of these two subspecies was unwarranted.

9. Dr. Richard Sage (personal communication) has recently accumulated interesting data of considerable relevance to the question of the validity of Pace's (1974) subspecific designations. He used starch gel electrophoresis in a study of eleven structural gene loci of *R. sphenocephala* from New Jersey, North Carolina, and three localities in

Florida (Tallahassee [not peninsular], Port St. Lucie [peninsular], and Big Pine Key [peninsular island]). The samples from the different localities were compared in regard to genetic identity by computing I-values (I = Nei's measure). I-values between populations ranged from .89-.95 among all possible comparisons. There was no higher similarity between the two peninsular populations than there was between the peninsular populations and the other three populations. Dr. Sage concluded: "There is no evidence of genetic distinctiveness of the peninsular Florida populations from localities away from the peninsula".

10. A strong case can also be made against the use of the name *R. virescens*. The most important reason that this name should be suppressed is that Cope (1889), in the first descriptions of the subspecies of *R. virescens* (no types designated), indicated (p. 398) that *R. virescens virescens* "is the *Rana utricularia* of Harlan", and again (p. 403), "The *Rana virescens virescens* is the *R. utricularia* of Harlan". The phraseology and context make it clear that *virescens* was not adopted as a nomenclatural replacement for *utricularia*, but merely as the earliest name (under Cope's assumption that it was already available) for a taxon of his own concept that included *utricularia*. The distinction is a fine but important one, for if simply a nomenclatural substitute, the replacement name ipso facto has the same type as the name substituted for, whereas if proposed as a new name which embraces but is not limited to another, it has its own type. The present situation is complicated by the fact that Cope was not intentionally creating a new name, although in fact he did. We conclude that it should not be interpreted as a replacement name in the strict sense. *R. virescens* is also a forgotten name that went out of general usage in the early part of this century. The name has been used in the primary zoological literature only once (Wyburn and Bacsich, 1948) in the last fifty years. It is apparent that Cope's (1889) description of *R. v. virescens* encompassed several species. Firstly, he indicated that the subspecies has its spots "margined with bright yellow" (p. 402) - a characteristic common to *R. pipiens*. Secondly, the frog in Cope's fig. 100 (p. 402) is most similar to *R. sphenocephala* in the shape of its snout. Thirdly, the described call "chock, chock, chock" (p. 402) is similar to that of *R. blairi* Mecham et al., 1973, but the mating calls or other vocalizations of most species of leopard frogs in the United States could be described in that manner. Fourthly, the distribution that Cope gave for *R. v. virescens* (p. 403) encompasses parts of the ranges of the leopard frog species *R. pipiens*, *R. sphenocephala*, *R. berlandieri* Baird and *R. blairi*. It is thus obvious that *R. v. virescens* is a nomen dubium.

11. In conclusion, the interest of nomenclatural stability is best served by the suppression of the names *utricularius* and *virescens*, and the conservation of *R. sphenocephala*. Lack of suppression would only encourage the perpetuation of forgotten names with confusing nomenclatural histories and applications in a complex of frogs where stability is particularly important. It is consequently pertinent at this point to mention

that one of the paramount objectives of the International Code of Zoological Nomenclature is to promote the stability of scientific names (see Preamble, p. 2,3). In para. 2 and 3 above we have complied with the basic requirements of the Code (I.C.Z.N., 1974: 87-89) for suppression of unused senior synonyms, viz.: "a *prima facie* case that stability is threatened will be made if it can be shown that the senior name is not known to have been used during the immediately preceding fifty years and that the name it would replace has been applied to a particular taxon, as its presumably valid name, by at least 5 different authors and in at least 10 publications during the same period". The usage of the name *sphenocephala* in the period 1924-1974 far exceeds the above minimum requirement. There was no usage at all of *utricularia* over that period (except for Pace, 1974) and only one of *virescens*. In our opinion the latter two exceptions do not justify refusal to suppress either name.

12. Accordingly, the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to suppress the species-group name *utricularius*, as published in the combination *Rana utricularius* Harlan, 1826, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to use its plenary powers to suppress the species-group name *virescens*, as published in the combinations *Rana virescens* Cope, 1889, and *Rana virescens virescens* Cope, 1889, for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(3) to place the specific name *sphenocephala*, as published in the binomen *Rana sphenocephala* Cope, 1886, on the Official List of Specific Names in Zoology; and

(4) to place the names suppressed in (1) and (2) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

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LEPTOTYPHLOPS AND *RAMPHOTYPHLOPS* FITZINGER, 1843 (REPTILIA, SERPENTES): PROPOSED CONSERVATION UNDER THE PLENARY POWERS. Z.N.(S.)2155.

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The present note deals with the names of two genera of burrowing snakes, one in the family TYPHLOPIDAE, the other in the family LEPTOTYPHLOPIDAE.

2. Robb (1966) split the genus *Typhlops* Oppel (1811: 54) on the basis of the structure of the male reproductive organs. Those species with hollow, eversible male organs were left in the genus *Typhlops*, while species with solid, protrusible male organs and blind pouches opening from the wall of the cloaca were placed in a separate genus. Robb selected *Ramphotyphlops* Fitzinger (1843: 24, type-species by original designation *Typhlops multilineatus* Schlegel, 1839: 40), as being the oldest available nominal genus whose type-species qualified for inclusion in the newly defined genus.

3. McDowell (1974: 20) accepted Robb's splitting of *Typhlops* into two genera, but rejected the name *Ramphotyphlops* on the grounds that it is antedated by *Typhlina* Wagler (1830: 196). McDowell believed that the type species of *Typhlina* was *Acontias lineatus* Schlegel (1839: 39) by subsequent designation (Fitzinger 1843: 24).

4. The genus *Typhlina*, when first erected, was based on two species, viz:

Acontias lineatus Reinw.
Typhlops sentemstriatus Schneid.

Acontias lineatus was at the time a nomen nudum. It had previously been published only by Fitzinger (1826: 54), Schlegel (1827: 291), and Boie (1827: 563) and these authors, like Wagler, had given no valid indication as defined in Article 16 of the Code. Thus it was an unavailable name in the sense of Article 68(c) and its designation as type-species of *Typhlina* is invalid. The only other originally included species, "*Typhlops sentemstriatus* Schneid". (a lapsus or an unjustified emendation of *Anguis septemstriatus* Schneider, 1801: 341) had at the time an available name and is therefore the type of *Typhlina* by monotypy.

5. Thus McDowell's claim that *Typhlina* antedates *Ramphotyphlops* cannot be substantiated, as the type-species of *Typhlina* (*septemstriatus*) does not come within the ambit of the genus *Ramphotyphlops*.

6. This raises another problem. *Anguis septemstriatus* has long been considered a member of the genus *Leptotyphlops* Fitzinger (1843: 24, type species by original designation *Typhlops nigricans* Schlegel, 1839: 38). *Typhlina* is therefore a senior subjective synonym of *Leptotyphlops* and would replace that name if the Law of Priority were applied.

7. After its original description *Leptotyphlops* was unused as a valid name for 48 years, being universally treated as a junior synonym of *Stenostoma* Wagler (*in* Spix 1824: 68; non *Stenostoma* Latreille, 1810: 217). When *Stenostoma* was found to be preoccupied (Boulenger, 1890: 243), there followed some 40 years of instability. Stejneger (1891: 501) resurrected *Leptotyphlops* while Boulenger (1892: 10), in the belief that *Leptotyphlops* was a nomen nudum, preferred to use *Glauconia* Gray (1845: 139). For three decades *Glauconia* was more widely used than *Leptotyphlops*, but during the late twenties the use of the latter name became increasingly popular, so that by 1930 very few specialists were still using *Glauconia*. Since 1930 *Glauconia* has appeared in print no more than half a dozen times, while *Leptotyphlops* has been employed in well over 300 publications including the well known faunal lists and textbooks of Ditmars (1939: 171), Smith & Taylor (1945: 20), Parker (1949: 19), Schmidt (1953: 154), Witte (1953: 152), Loveridge (1957: 245), Wright & Wright (1957: 36), FitzSimons (1962: 77), Roze (1966: 39), Peters & Orejas Miranda (1970: 165), Goin & Goin (1971: 301), Mertens (1971: 76), Leviton (1971: 149), Porter (1972: 211) and Pitman (1974: 65). After 50 years of stability it is felt that no useful purpose would be served by replacing *Leptotyphlops* with *Typhlina*, a name unused in its correct sense since its original description.

8. This undesirable nomenclatural change could be prevented by suppressing *Typhlina* and placing it on the Official Index of Rejected and Invalid Generic Names in Zoology. However, it could be argued, since the synonymy of this name with *Leptotyphlops* is subjective, that to suppress *Typhlina* would create problems should some future worker decide that *Anguis septemstriatus* and *Typhlops nigricans* are not congeneric. Fortunately *Saigonodon* (Peters, 1881: 71, type-species by original designation *Anguis septemstriatus* Schneider), a junior objective synonym of *Typhlina*, is available and could be utilised in such an eventuality. In fact we feel that the use of the name *Saigonodon* is to be preferred since, unlike *Typhlina*, it has been used several times since its original description (Bocourt 1882 *in* Duméril, Bocourt & Mocquard, 1870-1909: 507; Van Denburgh, 1897: 150 & 1912: 153; Stejneger & Barbour (1917: 73 and 1923: 79); Schmidt, 1922: 682; Klauber, 1931: 336; and Tanner, 1935: 267).

9. The Commission is therefore requested

(1) to use its plenary powers to suppress the generic name *Typhlina* Wagler, 1830 for the purposes of the Law of Priority but not for those of the Law of Homonymy;

(2) to place the generic names
  (a) *Leptotyphlops* Fitzinger, 1843 (gender: masculine), type species by original designation, *Typhlops nigricans* Schlegel, 1839, and
  (b) *Ramphotyphlops* Fitzinger, 1843 (gender: masculine), type species by original designation, *Typhlops multilineatus* Schlegel, 1839,
  on the Official List of Generic Names in Zoology:
(3) to place the specific names
  (a) *nigricans* Schlegel, 1839, as published in the binomen *Typhlops nigricans* (specific name of type-species of *Leptotyphlops* Fitzinger, 1843), and
  (b) *multilineatus* Schlegel, 1839, as published in the binomen *Typhlops multilineatus* (specific name of type-species of *Ramphotyphlops* Fitzinger, 1843)
  on the Official List of Specific Names in Zoology;
(4) to place the generic name *Typhlina* Wagler, 1830, as suppressed under the plenary powers in (1) above, on the Official Index of Rejected and Invalid Generic Names in Zoology.

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THE TYPE-SPECIES OF *GONIURELLIA* HENDEL, 1927 (INSECTA: DIPTERA: TEPHRITIDAE). Z.N.(S.) 2157.

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Goniurellia was created by Hendel (1927) as a subgenus of *Trypanea* [sic], properly *Trupanea* Schrank, 1795, without giving sufficient characters to differentiate it from *Trupanea* s. str. Munro (1955, 1957) considered *Goniurellia* a distinct genus, and gave (1957: 1038-1039) detailed characterizations for *Trupanea* (= *Trypanea*), *Goniurellia* and his new genus, *Dectodesis* (1957: 1044).

2. When creating *Goniurellia* (1927:198), Hendel designated as its type-species, what he believed to be *Trypeta augur* Frauenfeld, 1856, described it and figured its wing. A comparison of Hendel's figure and description of *Trypanea* (*Goniurellia*) *augur* with the original description and wing figure of Frauenfeld's *Trypeta augur*, shows that the two authors dealt with different species, and that Hendel misidentified the type-species of *Goniurellia*. Fraunfeld's species is characterized in his description and figure as follows: the brown subapical wing spot has in the basal cell a rounded hyaline indent; the brown ray which crosses the discal cell, although sometimes interrupted, ends on the fifth vein (Appendix 1, Fig. 1). Hendel's description and figure differ from Frauenfeld's in lacking a rounded hyaline indent in the basal cell, and in the shorter brown ray of the discal cell (Appendix 1, Fig. 2).

3. Frauenfeld's types are probably lost (Hardy, 1968:107 -108 per. commun. 1975, and our investigations). Fifteen specimens collected at A-Tur (Sinai Peninsula), the type locality of *augur* Frauenfeld (in the collection of the Department of Zoology, Tel Aviv University) fit Frauenfeld's description. They are also characterized by a very long geniculate proboscis, the haustellum and labella of which are each longer than the head, and by four scutellar bristles - characters not used by Frauenfeld in his description of TEPHRITIDAE. *Goniurellia augur* sensu Hendel (1927) has a short proboscis and only two scutellars. In 1927 (: 200) Hendel included in *Goniurellia* his new species *G. ensina*, among other species; in 1931 (: 11) he added his new species *G. rostrata*. Steyskal and El Bialy (1967) considered these two species as synonyms of *Trupanea kingi* (Bezzi, 1924). We agree with Steyskal and El Bialy, because the differences given by Hendel (1931) to separate *rostrata* from *ensina* and *kingi* do not warrant specific differentiation. Moreover, having checked the holotype of *ensina* and the type series of *kingi*, we conclude that all three are synonyms of *augur* Frauenfeld. The differences mentioned above between *augur* Frauenfeld and *augur* sensu Hendel necessitate their separation into different genera.

We agree with Munro's opinion (per. commun.) that *augur* Frauenfeld, which is distributed in Israel, Egypt and the Sudan, belongs to the African genus, *Dectodesis* Munro, which is characterized by a very long geniculate proboscis.

4. Hendel's concept (1927) of what he thought to be *augur* Frauenfeld applies to at least two hitherto unnamed species (Freidberg and Kugler, in preparation). Hendel (loc. cit.) also included in *Goniurellia* the subspecies *G. augur tridens* (Hendel), which was described and illustrated in 1910 (: 106-7, pl. 1, fig.4) as a variation of *Urellia augur* (Frauenfeld). Checking the lectotype of *tridens* Hendel (in the Naturhistorisches Museum, Wien), as well as other specimens which fit Hendel's descriptions, showed that in addition to its specific wing pattern, *tridens* has short haustellum and labella, and therefore, cannot be included in *augur* Frauenfeld. Based on these, as well as on additional characters, *tridens* is, without doubt, a distinct species.

5. We suggest that *G. tridens* (Hendel) should be the type-species of *Goniurellia* rather than *augur* Frauenfeld, for the following reasons:-

(a) A type of *G. tridens* (a lectotype female designated by Hardy, 1968: 127) is accessible (Recommendation 69B (6)), whereas the types of Frauenfeld are probably lost (Hardy, 1968: 107-108).

(b) When designating *augur* sensu Hendel as the type-species of *Goniurellia,* Hendel writes: "Rüssel relativ kurz, Labellen nur mässig verlängert". This is the case in *G. tridens* and the other species included by Hendel in *Goniurellia,* except in *G. ensina* and *G. rostrata* which are synonyms of *augur* Frauenfeld.

(c) The designation of *augur* Frauenfeld as the type-species of *Goniurellia,* would bring about the following unnecessary nomenclatural actions:

(1) *Dectodesis* Munro would have to become a synonym of *Goniurellia,* and its three species would change their well established generic name.

(2) Creating a new genus to include the species of *Goniurellia* except *augur* Frauenfeld.

Whereas designating *G. tridens* as the type-species of *Goniurellia* would render these actions unnecessary.

6. In order to avoid confusion and to maintain stability of nomenclature, it is requested that the International Commission should take the following actions:-

(1) use its plenary powers to set aside Hendel's (1927) designation of *Trypeta augur* Frauenfeld as the type species of *Goniurellia,* and having done so, designate *Urellia augur tridens* Hendel, 1910 to be the type-species of that genus;

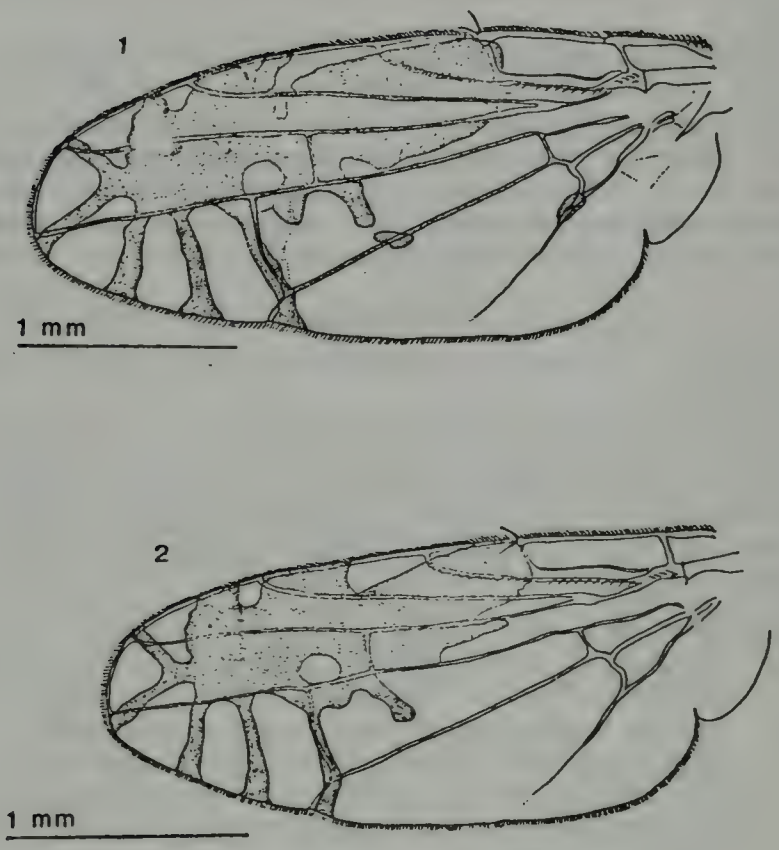

Plate 1

Fig. 1: *Trypeta augur* Frauenfeld, 1856, wing.
Fig. 2: *Trypanea* (*Goniurellia*) *augur* sensu Hendel, 1927, wing.

(2) place the generic name *Goniurellia* Hendel, 1927 (gender: feminine) type-species by designation under the plenary powers in (1) above, *Urellia augur tridens* Hendel, 1910 on the Official List of Generic Names in Zoology;

(3) place the species-group name *tridens* Hendel, 1910, as published in the trinomen *Urellia augur tridens* (type-species of *Goniurellia* Hendel, 1927), on the Official List of Specific Names in Zoology.

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ACYONIDAE AMEGHINO, 1889 (MAMMALIA): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.) 2159.

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1. The family-group name ACYONIDAE was formally established by Ameghino (1891, *Rev. Arg. Hist. Nat.* 1: 147n) for the marsupial genera *Acyon* and *Sipalocyon*. The name first appears as a nomen nudum in a list of families in Ameghino (1889, *Actas Acad. Cienc. Córdoba* 6: 894).

2. Trouessart (1898, *Cat. Mamm.* 5: 1215) later recognized the taxon as a subfamily, ACYONINAE, and included it within the family BORHYAENIDAE which was established by Ameghino (1894, *Bol. Acad. Cienc. Córdoba* 13: 371).

3. The last use of the family-group name ACYONIDAE as a valid name was by Trouessart (1904, *Cat. Mamm., Suppl.* 1: 176) who recognized it as denoting a distinct taxon from BORHYAENIDAE and Palmer (1904, *Index Gen. Mamm.* 23: 877) who included it as a synonym of the family-group name BORHYAENIDAE. Palmer (*ibid.* 877n) noted "Acyonidae has priority of five years merely by publication in a nominal list, but as Borhyaenidae has come into more general use it is here adopted provisionally".

4. The family-group name ACYONIDAE has remained unused as a senior synonym in all zoological literature for the last seventy years. During this period of time the family-group name BORHYAENIDAE has always been used, and ACYONIDAE ignored by everyone working on members of this family: Cabrera (1927, *Revta. Mus. La Plata* 30: 273), Gromova (1959, *Fundamentals of Paleontology: Mammals* 13: 48, 70), Patterson (1965, *Breviora* 217: 6), Patterson and Pascual (1968, *Quart. Rev. Biol.* 43: 419), Paula Couto (1952, *Amer. Mus. Novit.* 1559: 23; 1961, *An. Acad. Brasil. Ciênc.* 33(3/4): 329), Piveteau (1961, *Traité de Paléontologie* 6(1): 605), Riggs (1934, *Trans. Amer. Phil. Soc.* 24(1): 8), Romer (*Vertebrate Paleontology,* all editions, 1933: 264; 1945: 319; 1966: 204), Simpson (1930, *Foss. Cat.* 1(47): 42; 1941, *Amer. Mus. Novit.* 1118: 1; 1945, *Bull. Amer. Mus. Nat. Hist.* 85: 42, 172; 1948, *Bull. Amer. Mus. Nat. Hist.* 91(1): 38), Thenius (1969, *Handbuch der Zoologie* 8(47), 2(1): 75), Viret (1955, *Traité de Zoologie* 17(1): 174), and many others.

5. The genus *Acyon* Ameghino 1887 is a junior synonym of *Cladosictis* Ameghino 1887 (Cabrera, 1927, *Rev. Mus. La Plata* 30: 288).

6. For the reasons given in paragraphs 3 and 4, we request the Commission:

(a) to use its plenary powers to suppress the family-group name ACYONIDAE Ameghino, 1889 for the purposes of the Law of Priority, but not for those of the Law of Homonymy;

(b) to place this family-group name on the Official Index of Rejected and Invalid Family-Group Names in Zoology.

PSAMMOPHIS MONILIGER var. *BILINEATUS* PETERS, 1867 (REPTILIA: COLUBRIDAE): PROPOSED SUPPRESSION UNDER THE PLENARY POWERS IN FAVOUR OF *P. SIBILANS SUBTAENIATA* PETERS, 1882. Z.N.(S.) 2165.

By Donald G. Broadley (*Umtali Museum, Umtali, Rhodesia*)

The purpose of this application is to suppress a name, not used in the literature during the last hundred years, which has proved to be a senior synonym of *Psammophis subtaeniatus subtaeniatus* Peters, 1882.

1. In 1867 W.C.H. Peters erected the name *Psammophis moniliger* var. *bilineatus* for a sand snake from Otjimbingue, South West Africa (*Mber. Akad. Wiss. Berlin:* 237) and he used the name for the second and last time in 1869 (*Oefvers. Vet. Akad. Forhandl.* : 661). The type specimen is No. 5758 in the Zoologisches Museum der Humboldt-Universität, Berlin. The name has never since then been used as a valid name.

2. In 1882 Peters applied the name *Psammophis sibilans* var. *subtaeniata* to specimens from Tete and Boror, Moçambique (*Reise nach Mossambique*, vol. 3: 121); the type locality was subsequently restricted to Tete (Broadley, 1966, *Arnoldia Rhodesia*, vol. 2 (36): 7).

3. In 1895 Boulenger (*Proc. zool. Soc. Lond.* : 538) presented a key to the genus *Psammophis*, in which the name *subtaeniatus* Peters was applied to the eastern populations of the species, which normally have eight supralabials with the fourth and fifth entering the orbit. A new name, *Psammophis bocagii* (type locality: Benguela, Angola) was applied to the western populations of *Psammophis subtaeniatus*, which have nine supralabials with the fourth, fifth and sixth entering the orbit.

4. In 1940 Loveridge revised the African species of *Psammophis* (*Bull. Mus. comp. Zool. Harv.* vol. 87: 12-69) and applied the name *subtaeniatus* Peters to the western race of *Psammophis subtaeniatus*, using *sudanensis* Werner 1919 (*Denks. Akad. Wiss. Wien*, vol. 96: 504) for the eastern race. This nomenclature has been used by all subsequent authors (see Loveridge, 1953, *Bull Mus. comp. Zool. Harv.* vol. 110: 276; Mertens, 1955, *Abh. senckenb. naturforsch. Ges.* vol. 490: 98 and 1971, *ibid* vol. 529: 89; Broadley, 1959, *Bull. Mus. comp. Zool. Harv.* vol. 120: 47; 1962, *Occ. Pap. natn. Mus. Sth. Rhod., Ser. B*, vol. 4: 833; 1966, *Arnoldia Rhodesia* vol. 2: (36) 7; 1971, *Puku*, vol. 6: 88; V. FitzSimons, 1962, *Snakes of Southern Africa*; 223, and 1966, *Ann. Transv. Mus.* vol. 25: 60; Wilson, 1965, *Puku*, vol. 3: 163; Pienaar, 1966, *Reptiles of the Kruger National Park:* 186). These references satisfy the requirements of Art. 79b of the Code.

5. Mertens (1955, *op. cit.*) examined the type of *Psammophis moniliger* var. *bilineatus* Peters, 1867 and found it to belong to the form currently known as *Psammophis subtaeniatus subtaeniatus* Peters; this

identification has been confirmed by the present author. Mertens retained the established nomenclature in the interest of stability and subsequent authors have treated *bilineatus* as a *nomen oblitum.*

6. I have recently examined the syntypes of *Psammophis sibilans* var. *subtaeniata* Peters, 1882, which are Nos. 2470 (Boror) and 9992 A and B (Tete) in the Zoologisches Museum der Universität, Berlin. The material is composite, the Tete specimens representing the western race with nine supralabials, while the Boror specimen is an example of the eastern race with eight supralabials. I hereby select No. 9992 A as lectotype, in conformity with my earlier restriction of the type-locality.

7. Strict application of the Law of Priority would result in the name of the taxon which for the past 36 years has been known as *Psammophis subtaeniatus subtaeniatus* Peters being changed to *Psammophis bilineatus bilineatus* Peters.

8. In the circumstances, maximum stability in nomenclature can best be achieved by suppressing the name *bilineatus* Peters under the plenary powers.

9. The International Commission on Zoological Nomenclature is therefore requested to take the following action:-

(1) to use the plenary powers to suppress for the purpose of the Law of Priority, but not for the purpose of the Law of Homonymy, the trivial name *bilineatus* Peters, 1867, as published in the combination *Psammophis moniliger* var. *bilineatus;*

(2) to place the trivial name *subtaeniata* Peters, 1882, as published in the combination *Psammophis sibilans* var. *subtaeniata,* on the Official List of Specific Names in Zoology, with ZMB 9992 A from Tete, Moçambique as lectotype;

(3) to place the trivial name *bilineatus* Peters, 1867, as published in the combination *Psammophis moniliger* var. *bilineatus,* on the Official Index of Rejected and Invalid Specific Names in Zoology.

PHILODRYAS NATTERERI STEINDACHNER, 1870 (REPTILIA: SERPENTES): PROPOSED CONSERVATION. Z.N.(S.) 2166.

by Robert A. Thomas (*Dept. of Biology, Texas A. & M. University, College Station, Texas, 77843*)

Boulenger (1896: 134) mentioned in a footnote that he had examined the type specimen of *Psammophis molochina* Berthold (referred to *Philodryas* Wagler, 1830, and unjustifiably emended to *molorchina* by Jan, 1863: 84) and found it to be an example of *Philodryas nattereri* Steindachner, 1870. He additionally stated that he was not aware of a valid description of this species.

2. I have recently found the proper description presented by Berthold (1846: 143-144; [reprints: 21-22]) and have examined the type specimen (Zoologisches Institut und Museum, Universität Göttingen no. 272a) and corroborate Boulenger's identification. Thus, Berthold's name antedates that proposed by Steindachner for the same species by 24 years. The species-group name *molochina* has received mention only by the aforementioned footnote of Boulenger (1896) since Jan (1863). *Philodryas nattereri,* on the other hand, has been consistently used for this species since 1870 in at least 32 publications including Amaral (1927: 67, 1929: 213, 1935: 189, 1973: 3), Dowling (1969: 2-4), Hoge (1952: 220), Pessôa (1967: 50-52), Pessôa *et al.* (1974), Peters and Orejas-Miranda (1970: 243), and Schmidt and Inger (1951: 462).

3. In view of the above, *Psammophis molochina* Berthold qualifies as a *nomen oblitum* (Article 79b, as amended in *Bull. zool. Nomencl.* vol. 31: 87-89). In the interest of nomenclatural stability, Article 23a-b of the aforementioned amendments to the 1964 Code is invoked in the present request that the International Commission on Zoological Nomenclature:

(1) use its plenary powers to suppress the species-group name *molochina* Berthold, 1846, as published in the combination *Psammophis molochina,* for the purposes of the Law of Priority but not for those of the Law of Homonymy; and

(2) place the species-group name *molochina* of Berthold, 1846, as published in the binomen *Psammophis molochina,* and as suppressed in (1) above on the Official Index of Rejected and Invalid Specific Names in Zoology.

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THE STATUS OF *SIPHONOPHORA* FISCHER, 1823 (BRYOZOA) AND THE VALIDITY OF *SIPHONOPHORA* BRANDT, 1837 (DIPLOPODA, POLYZONIIDA) Z.N.(S.) 2168

By C.A.W. Jeekel (*Institute of Taxonomic Zoology (Zoological Museum), University of Amsterdam, the Netherlands*)

The present case concerns the validation under the plenary powers of the generic name *Siphonophora* Brandt, 1837, currently in use for a genus in the diplopod order Polyzoniida (= Colobognatha) embracing over 80 nominal species. Until recently the validity of *Siphonophora* Brandt was no point of discussion. Some years ago, however, it was discovered that its status might be menaced by the existence of what seems to be an available name in Bryozoa, *Siphonophora* Fischer, 1823 (Jeekel, 1971: 45).

2. The name *Siphonophora* was proposed by Brandt (1837: 179) for a monotypical genus of diplopods, which was briefly diagnosed. Its type-species, *S. portoricensis* Brandt, 1837, from the island of Puerto Rico, was mentioned by name only. The proposal of the generic and specific names satisfies the provision of the Code as regards availability (Art. 12 and 16a (vi)).

3. Later, especially in the course of this century, many species were described in the genus, which now has become perhaps the largest in the order Polyzoniida. Today *Siphonophora* is used as the valid generic name for over 80 species occurring in the Oriental, Australian and Neotropical regions.

4. The characteristic features of *Siphonophora* soon led to the proposal of a separate family for the genus by Newport (1844: 195). The name SIPHONOPHORIDAE has found general acceptance ever since.

5. Prior to the proposal of *Siphonophora* by Brandt, the name was introduced in literature by Fischer de Waldheim (1823: 11) as a generic name in Bryozoa. The relevant passage in the cited, apparently very rare publication may be quoted as follows:-

Famil. IV. Celleporae.

Cellulis non irritabilibus, singulis aut collectis.

Siphonophora. Fisch. *Tubulipora.* Lam.

Cellepora. Fabr.

6. In the context of the publication the use of the name *Siphonophora,* with the citation of *Tubulipora* Lamarck as a synonym, can be interpreted in two ways: it is possible that Fischer proposed

Siphonophora merely as a substitute for *Tubulipora* for some obscure, though obviously invalid, reason. In this case *Siphonophora* Fischer is an available name, in accordance with Art. 16a (iii) of the Code, although, of course, a junior objective synonym of *Tubulipora*.

7. On the other hand, *Siphonophora* might have been proposed to serve as a generic name for a part of the contents of *Tubulipora* Lamarck. Evidence for such an intention would have been the appearance of *Tubulipora* as a valid genus elsewhere in Fischer's publication. In that case the name *Siphonophora* Fischer, published without diagnosis and without the citation of the valid name of any originally included species, could be easily disqualified as a nomen nudum. However, nowhere in Fischer's publication can a second citation of the name *Tubulipora* be found, so that we have to face the consequences of the first alternative, that *Siphonophora* Fischer, is an available name, and a senior homonym of *Siphonophora* Brandt.

8. In his Nomenclator, Neave (1940: 206) lists *Siphonophora* Fischer as a nomen nudum, and it is therefore important to know the current status of the name in literature on Bryozoa. I put this question to Dr. F.M. Bayer, Miami, U.S.A., who passed it on to Dr. Richard Boardman, Washington, D.C., U.S.A.. From his answer I concluded that, whereas *Tubulipora* Lamarck, 1816, is an important name in Bryozoa which is in wide current usage, and which has a family name based on it, *Siphonophora* Fischer seems to be completely unknown or forgotten.

9. Considering the above, and as nothing is gained by the discontinuation of the use of *Siphonophora* Brandt and SIPHONOPHORIDAE Newport, the International Commission on Zoological Nomenclature is requested:

(1) to use its plenary powers to suppress the generic name *Siphonophora* Fischer, 1823, for the purposes of the Law of Priority and the Law of Homonymy;

(2) to place the name *Siphonophora* Brandt, 1837 (gender: feminine), type-species, by monotypy, *Siphonophora portoricensis* Brandt, 1837, on the Official List of Generic Names in Zoology;

(3) to place the name *portoricensis* Brandt, 1837, as published in the binomen *Siphonophora portoricensis* (type-species of *Siphonophora* Brandt, 1837) on the Official List of Specific Names in Zoology;

(4) to place the family-group name SIPHONOPHORIDAE Newport, 1844 (type-genus *Siphonophora* Brandt, 1837) on the Official List of Family-Group Names in Zoology;

(5) to place the name *Siphonophora* Fischer, 1823, as suppressed under the plenary powers in (1), on the Official Index of Rejected and Invalid Generic Names in Zoology.

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PIERIS CASTORIA REAKIRT, 1867 (INSECTA, LEPIDOPTERA, PROPOSED SUPPRESSION UNDER THE PLENARY POWERS. Z.N.(S.)2170

By Arthur M. Shapiro (*Departments of Zoology and Entomology, University of California, Davis, California 95616, U.S.A.*)

Recent biological investigations have indicated that Californian populations of the *Pieris napi* Linnaeus, 1758 complex (Insecta, Lepidoptera, PIERIDAE) are differentiated into two subspecies: a coastal, bivoltine, seasonally diphenic one for which the oldest valid name is *Pieris venosa* Scudder, 1861 and an interior, univoltine, monophenic one whose name is at issue in this petition. The oldest unambiguous name for this subspecies, and the one in current use, is *Pieris napi microstriata* J.A. Comstock, 1925. Evidence is presented which suggests that the name *Pieris castoria* Reakirt, 1867, which has been used almost exclusively as an infrasubspecific "form" name (as a junior subjective synonym of *Pieris venosa*) for 99 years, is applicable to the interior subspecies. Since transferring the name *castoria* to the interior subspecies would cause intolerable confusion, the International Commission on Zoological Nomenclature is asked to suppress it under the Plenary Powers, an action which would preserve current usage.

2. Reakirt, (1867, p. 238) described *Pieris castoria*, apparently on the basis of a male received from Lorquin (Brown, 1964, p. 212 and *in litt.*). The description is brief but adequate for recognition. It is reproduced below as its wording is vital to the matter at issue:

> 2. PIERIS CASTORIA, nov. sp.
>
> Size and form of *Pieris oleracea*, Harris.
>
> *Male*, upper side pure white, inner half of costa of primaries, and base of both wings, strewn with a few dark atoms; a rounded black spot in the medio-superior interspace of the fore wings, situate as in the preceding species; no other markings; fringes white, expanse 2-2.12 inches.
>
> Underneath immaculate white; a faint yellowish tinge on the apex of the primaries, and along the costa of the secondaries.
>
> Body black, with whitish hairs below; antennae black, with incomplete white annulations interrupted above. Club yellowish, or yellowish brown at tip.
>
> *Hab* — California. Coll. Tryon Reakirt.

3. Scudder (1861, p. 182) described *Pieris venosa* from San Mateo and Mendocino city, California, both coastal localities in the summer-fog belt. The description is unambiguously of the first-brood phenotype of coastal populations, characterized by heavy black veining on the ventral hindwing and apex of forewing. This is the oldest valid name for any coastal Californian population of the *Pieris napi* complex.

4. Strecker (1877, p. 62) first suggested that *castoria* might be the second-brood phenotype of *venosa*, by analogy to *napaeae* Esper in Europe. W.H. Edwards (1881, p. 94) in a review of the complex world-wide, echoed the same idea. The name *castoria* has been used in this sense by most of the subsequent major writers on Californian butterflies: Comstock, 1927; Tilden, 1941; Tilden, 1965; Opler and Langston, 1968; Warren, 1968; and Howe, 1975, are examples. In a work notorious for its errors, Wright (1906) figured three typical *venosa* as "*castoria*", a usage followed by a few writers in the next five years, relying on Wright's book (Coolidge, 1908; Coolidge and Newcomer, 1908; Williams, 1910). Tilden (1975) corrected this and many other misdeterminations by Wright. Since *venosa* is six years older than *castoria* and the specimens figured by Wright look nothing like Reakirt's description of *castoria*, there is no rationale for this benighted use as a "senior synonym". The next use of *castoria* was by Seitz (1924), who listed it as a variety of *napi* found in California, but also listed *venosa* as a separate species, also from California (pp. 59-60)! Holland (1932) ignored the California taxa altogether. Langston (1975) suggested (pp. 85-86) on phenological grounds that *castoria* might be a distinct species - a suggestion disproved experimentally by Shapiro (1975). Thus, since 1877 the name *castoria* has been generally identified as a junior subjective synonym of *venosa* and used informally as a seasonal "form" name for the second brood in *venosa* populations; throughout this period it has never been used as a senior synonym nor applied in any sense other than Strecker's, except for the misdetermination by Wright.

5. J.A. Comstock (1925, p. 125) described *Pieris napi microstriata* from Eldredge, Sonoma County, inland from the fog belt in a locality where the population is normally univoltine and monophenic. Aside from Comstock's (1927) book, this name received virtually no use since the validity of a subspecific distinction was not generally recognized. C. dos Passos (1964) treated *microstriata* as a junior subjective synonym of *venosa*. Garth and Tilden (1963) noted that Sierran *napi* were more lightly marked than typical *venosa*, but failed to connect them to Comstock's name and concluded that no subspecies name was available for them. When the magnitude of the biological differences between coastal and interior California *P. napi* became apparent, I resurrected *microstriata* (Shapiro, 1975; 1976a, b) as the oldest name for the latter. At that time I (like everyone else) was unaware that the name *Pieris castoria* might have any application other than the established usage (i.e., that of Strecker 1877). Thus the name *microstriata* has *not* received sufficient use to constitute a *prima facie* case

that de-stabilization of nomenclature would occur were it superseded by an unused senior synonym (Article 79).

6. Wild second-brood *Pieris napi venosa* almost never match Reakirt's description of *castoria*. They differ consistently in having more or less black pattern on the veins of the hindwing ventrally and at the dorsal forewing apex. Langston (*in litt.*) reports that in twenty years of collecting in northern and central California he has taken only one second-brood *napi* matching Reakirt's description, a single male in Contra Costa County at an *Inner* Coast Range locality out of the fog belt, i.e. in *microstriata* habitat. James Bruce Walsh, who has studied in detail the phenology of *P. n. venosa* in Monterey County, reports (*pers. comm.*) that he has never seen a specimen there matching Reakirt's description. There are no such specimens in the collections of the University of California at Berkeley and Davis or in the California Academy of Sciences. The Natural History Museum of Los Angeles County contains several. Among these are two labelled "Oakland / May 8, 1930" and two labelled "Bear Valley, Marin Co. / April 15, 1931" which are pinned from a Riker mount and which I judge to be mislabelled. Accurately labelled specimens matching Reakirt's description in pattern (but not in size) are from Mill Valley and Bear Valley, both Marin County.

7. Both coastal and interior *Pieris napi*, when reared under environmental conditions which inhibit pupal diapause, give rise to a second brood which is more lightly marked than the first. Coastal (*venosa*) stocks produce their usual second-brood phenotype under these conditions with fewer than 10% of reared males matching Reakirt's description. Interior (*microstriata*) stocks produce a more lightly-marked second-brood phenotype which matches Reakirt's description in 75-100% of males. Could Reakirt's type have been from an interior rather than a coastal population? (See Shapiro, 1975, 1976a).

8. Wild second-brood specimens occur very sporadically in interior (*microstriata*) populations, most frequently in the Coast Ranges and around the Napa Valley in areas subject to some maritime influence in summer, and mostly in cool, wet years. Most California collectors have never seen one.Populations in these localities are transitional from *venosa* to *microstriata*, and show the greatest phenotypic variability under our experimental regimes (Shapiro, unpublished data). Second-brood Sierra Nevada specimens are essentially unknown. No wild-collected ones exist in any of the institutional collections cited under (6) above. A partial second brood, males of which match perfectly Reakirt's description and our reared material, is produced fairly regularly in two cool, moist box canyons in the American River gorge below Auburn, Placer County (180m) (Shapiro 1976a). At Lang Crossing in the Yuba River gorge, Nevada County (1365m) I have taken one male of the same phenotype. Despite enquiries to experienced Sierran collectors, I have found no other records.

9. The putative syntypes of *castoria* are in the Strecker collection at the Field Museum of Natural History in Chicago. Strecker, in his MS catalogue of his collection, identified "specimen a" as the model of his figure 4 (Strecker 1877, plate viii) and the "type" of *castoria*. This individual, bearing a label "Orig. Type/Coll. Reak." in Strecker's handwriting, and matching closely the figure cited, was examined and photographed for me by Lee D. Miller and F. Martin Brown in 1975. It differs from Reakirt's description in having dark scaling along the vein tips of the forewing both dorsally and ventrally and along the veins of the hindwing ventrally. All of these are ruled out by Reakirt's assertion: "no other markings". The specimen, which must be considered a pseudotype, is an "average" second-brood coastal specimen (e.g. from San Mateo or Marin Counties) and conforms to the usage which dates from Strecker. At my request Brown examined all other *Pieris napi* in the Strecker collection; none matches the description well enough to qualify as lectotype of *castoria*. Reakirt's original specimen must be assumed lost, perhaps even before his collection passed into Strecker's hands.

10. There is little information available on Lorquin's travels to help us decide where he collected the type of *castoria*. F.M. Brown, who is trying to reconstruct his itineraries, advises me *in litt.*: "By the 1860s he had travelled in the interior of northern California, but little or no collecting on the northern coast." Boisduval (1868) sketches Lorquin's travels; he says that prior to 1857 Lorquin had explored "tous les environs de San Francisco, puis les bords du Sacramento et de la Plume ... dans la chaine de la Sierra-Nevada ... jusque dans les forêts de l'intérieur". This includes both *venosa* and *microstriata* habitats.

11. According to Gudde (1969, p.115), a town called Castoria existed in California from 1850 to 1859, precisely when Lorquin was collecting. This place is now French Camp, San Joaquin County. The site had been the headquarters of French beaver trappers on the San Joaquin River and its tributaries, hence both names. Given Lorquin's nationality it seems likely that he would have made it a point to visit there, perhaps regularly. In the same paper in which he describes *castoria*, Reakirt (1867, p. 238) also names *Pieris yreka*. Yreka, Siskyou County, was named in 1852 (Gudde 1969, p. 371). These towns can thus be inferred to be the localities of Lorquin's specimens, subsequently Reakirt's types. Castoria = French Camp is on the floor of the San Joaquin Valley at an elevation of less than 3 m. In Lorquin's day it lay in a region of marshland and dense riparian cottonwood-willow-alder forest, now largely eradicated. *Pieris napi* ssp. occur today in riparian habitats in canyons in both the Coast Ranges and Sierra Nevada, but not on the floor of the Sacramento - San Joaquin Valley. Reconnaissance of riparian habitats in 1972 through 1976 has failed to turn up any *Pieris napi* anywhere on the Valley floor. I judge it impossible to obtain strictly topotypical material for a neotype designation. If Lorquin used "Castoria" loosely to refer to a large area around the camp, foothill populations may be extant.

12. Populations in the foothills both east and west of Castoria = French Camp would be expected to be univoltine, monophenic *microstriata* like other known ones; on climatic grounds it thus seems safe to assume that the postulated, presumably extinct Valley animals were also of this subspecies. The probability of producing a second brood may have been distorted by the unusual weather which obtained in central California during Lorquin's sojourn. Moist years favour second-brood emergences, and the water years 1852/53, 1859/60, 1861/62, 1864/65 and 1866/67 all saw more than 110% of mean annual rainfall (based on 1849-1969) at Sacramento, with 200% in the great flood year of 1861/62.

13. Based on the inferred type locality, *castoria* is the oldest name applicable to the interior subspecies, antedating *microstriata* by 58 years. Ordinarily the failure of the latter name to qualify for conservation under Article 79 would end the matter here. However, the apparently erroneous usage of *castoria* dating from Strecker, 1877, documented in paragraph (4) above, is so well established that were it upset, great confusion would result — it has been used with complete consistency for well over 50 years. In addition, there are three complicating circumstances arguing against transferring the name *castoria* to the interior subspecies: (i) the subspecies would be based on a phenotype almost never produced in nature and unknown to collectors familiar with the populations; (ii) the applicability of the name to the subspecies, as noted in paragraphs 11 and 12 above, is based on inferences about an apparently extinct, hence unverifiable, population; and (iii) the type-locality would have to be interpreted very broadly to obtain a neotype to fix the usage. We do not know whether *napi* populations exist at all in the closest foothills of either range, and as noted in (8) second-brood specimens of interior populations are altogether very rare so that it might require many years' surveillance before a single one is taken in any nearby population!

14. Two major volumes on California butterflies are in preparation, and it is thus desirable to fix the nomenclature of these entities at this time. Moreover, studies in our laboratory indicate that the *Pieris napi* complex is important in paleoclimatological and biogeographic inference, and its subspecific nomenclature is thus likely to appear with increasing frequency in the literature of those disciplines. The taxonomy of the entire complex world-wide is in flux as a result of radical proposals advanced by B.C.S. Warren in several publications. Although Warren's work does not touch on the present problem directly, it increases the likelihood of a global revision of the complex in the near future. The biological problems presented in this petition, bearing on the identities of the California taxa, would not be known by a reviser based anywhere else, particularly if working only with museum material.

15. If the Commission elects to suppress the name *Pieris castoria*, that name may still be used informally, infrasubspecifically for the second-brood phenotype of *Pieris napi venosa* as it has been for 99 years. As the

conspecificity of all the entities involved (*venosa, castoria,* and *microstriata*) is established beyond question in our experiments (Shapiro, 1975, 1976a, b and unpublished) there is no possible loss to future revisers if this name is formally invalidated.

16. An alternative approach would be to designate as neotype of *castoria* one of the few known second-brood coastal (*venosa*) males which matches the original description, thus attaching the name to the organism for which it is commonly used. As noted in paragraphs 11 and 12 above, the type locality of *castoria* is apparently not in *venosa* territory at all; thus such an action would violate Article 75 and would require an action by the Commission under the Plenary Powers. In my opinion the proposed suppression of *castoria* is the preferable alternative since it is consistent with the Code, but the Commission can of course opt for an irregular neotype designation at its discretion, and a suitable specimen from the Natural History Museum of Los Angeles County is available.

17. Therefore, in the interest of stability and uniformity in butterfly nomenclature, I hereby request that the International Commission on Zoological Nomenclature (i) apply its plenary powers to suppress the name *castoria*, as published in the binomen *Pieris castoria* Reakirt, 1867 for purposes of the Law of Priority but not for those of the Law of Homonymy, and to place it on the Official Index of Rejected and Invalid Specific Names in Zoology; and (ii) place the name *microstriata*, published as *Pieris napi microstriata* Comstock, 1925, on the Official List of Specific Names in Zoology.

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CULEX LOEWI GIEBEL, 1862 (INSECTA: DIPTERA: CULICIDAE): REQUEST FOR SUPPRESSION UNDER THE PLENARY POWERS SO AS TO CONSERVE *TOXORHYNCHITES BREVIPALPIS* THEOBALD, 1901 (OFFICIAL LIST OF GENERIC NAMES No., 1341; OFFICIAL LIST OF SPECIFIC NAMES, NO. 1615). Z.N.(S.) 2173.

By G.B. White (*Department of Entomology, British Museum (Natural History), London, SW7 5BD*)

Opinion 548 of the International Commission on Zoological Nomenclature (*Opin. Decl. int. Commn zool. Nom.*, vol. 20: 167-173) ruled in 1959 that the name *Toxorhynchites* Theobald, July 1901, is valid and that *T. brevipalpis* Theobald, November 1901, is the type-species of that genus, by subsequent monotypy. The name *Toxorhynchites* Howard, June 1901, ex Theobald MS, was suppressed simultaneously under the plenary powers for purposes both of the Law of Priority and of the Law of Homonymy.

2. At present the genus *Toxorhynchites* Theobald is generally regarded as forming a monobasic subfamily of the CULICIDAE, for which the name TOXORHYNCHITINAE Theobald, 1905: 5, has priority. As type-species of the nominate subgenus of *Toxorhynchites, T. brevipalpis* is pivotal to the definition of the whole subfamily TOXORHYNCHITINAE. Most workers divide the genus *Toxorhynchites* into three subgenera: *Ankylorhynchus* Lutz, 1904, and *Lynchiella* Lahille, 1904, in the New World and *Toxorhynchites* sensu stricto in the Old World. A minority of authors follow Lima, Guiton & Ferreira, 1962, in maintaining generic rank for each of these three groups. Latest summaries of information on the TOXORHYNCHITINAE are the biosystematical review by Steffan (1975) and relevant entries in the revised edition of "A synoptic catalog of mosquitoes of the world" by Knight & Stone (in press).

3. *T. brevipalpis* is an ornate, conspicuous but non-biting mosquito species with a natural range covering most of the Ethiopian faunal region. The holotype female is deposited in the Department of Entomology, British Museum (Natural History), London, U.K. Since the work of Edwards (1941) it has been accepted that the nominate form of *brevipalpis* inhabits eastern and southern Africa, Zanzibar and Malagasy, while subspecies *conradti* Grünberg, 1907, has darker adults and occupies western and central Africa. One or other subspecies of *T. brevipalpis* has been reported from at least 29 of the 38 mainland countries in the Ethiopian region.

4. The carnivorous behaviour of *Toxorhynchites* larvae has repeatedly attracted the interest of applied entomologists seeking agents of biological control. In this capacity *T. brevipalpis*, which breeds in flooded tree-holes, motor-car tyres and so forth, is regarded as an important predator of certain medically important mosquito species in the genus *Aedes* Meigen, 1818. For

this reason, the bionomics of *T. brevipalpis* have been investigated by Bonnet & Hu (1951), Muspratt (1951), Corbet (1963), Corbet & Griffiths (1963), Correia (1967), Sempala & Ssenkubuge (1971), Trpis (1972, 1973a, b) and Trpis & Gerberg (1973). As an extension of this biological control interest, strains of *T. brevipalpis* have been introduced to Hawaii (Bonnet & Hu, 1951; Nakagawa, 1963), to American Samoa (Peterson, 1956) to Tahiti (Bonnet & Chapman, 1956) and to Sint Maartens in the Leeward Islands (Gerberg, *in lit.*, 4. iv. 1976). With a view to its further exploitation for larval control of vectorially active species of mosquitoes, *T. brevipalpis* is currently under colonisation in several African and American laboratories. Considerable literature dealing with the experimental study of this species has consequently been added to the primary and secondary taxonomic publications in which *T. brevipalpis* has been described, redescribed and its distribution recorded in great detail. In all, *T. brevipalpis* is documented in over 100 books, papers and other reports.

5. Hennig (1966: 5) published a determination by Mattingly (*in litt.* 16. xii. 1965) that *Culex loewi* Giebel, 1862, belongs to the *T. brevipalpis* species group. In Mattingly's view the female holotype of *loewi* appeared to belong to one or other of the subspecies known as *brevipalpis* and *conradti*. I have also now examined this specimen, No. 4179, in the Naturwissenschaftlichen Museum der Coburger Landesstiftung in Coburg. It was kindly made available to me by the Director through the courtesy of Professor Dr. Willi Hennig, and in my opinion, despite the relatively denuded scale patterns, there can be little doubt that it is marked as in *brevipalpis* and not like *conradti*, the pale scaling of the second fore tarsomere being particularly diagnostic when seen from below. This implies that *loewi* Giebel, 1862, should be regarded as a senior subjective synonym of *Toxorhynchites brevipalpis* Theobald, 1901. However, in view of the way that Article 23 (a-b) of the Code was redrafted in 1972 at the 17th International Congress of Zoology held at Monaco, it seems desirable to request the Commission to use its plenary powers to promote nomenclatural stability by upholding validity of the much used junior synonym in this case.

6. *Culex loewi* was originally described and named on the supposition of it being a fossil embedded in amber of unknown origin. Other specimens in the same collection and also described in the same paper were a Gekko and 16 species in 6 Orders of Insecta. Klebs (1910) later realised that this collection consisted of material not in fossil amber but in modern copal. On the strength of Klebs's opinion, Edwards (1932) listed *Culex loewi* in Fascicle 194 of the "Genera Insectorum" as being "Quaternary [?? = *Aedes fulgens* Edw.]. Gum Copal (? E. Africa)". Evidently Edwards had not seen the specimen which so obviously resembles *T. brevipalpis*, so he guessed at its age, identity and origin. Similarly, in the first edition of "A synoptic catalog of the mosquitoes of the world" (Stone et al, 1959: 286) the entry for *C. loewi* indicates "Quaternary (Gum Copal. Type-locality: ? East Africa". Following the publication of

Hennig's (1966) review of Giebel's copals, Stone (1967: 218) emended the World Catalog entry to "*Toxorhynchites loewi* (Giebel)" but left the species listed as a Quaternary fossil form. The literature appears to lack any further usages of this name *loewi*.

7. Several authors have attested to the modernity of Giebel's copals and the specimens therein. Giebel's names therefore stand as available for contemporary taxa. One of these names has already been accorded priority. Crosskey (1966) synonymised *Tachina succini* Giebel, on which the genus *Palexorista* Townsend had been founded, with *Prosturmia solennis* (Walker, 1859), so sinking *Prosturmia* Townsend, 1927, under *Palexorista* Townsend, 1921 (Insecta: Diptera: TACHINIDAE). In another case, Wermuth (1966) identified *Platydactylus minutus* Giebel, 1862, as most probably being a specimen of *Hemiphyllodactylus typus* Bleeker, 1860 (Reptilia: Sauria: GEKKONIDAE); in this case Giebel's name did not take priority. Both Crosskey (1966) and Wermuth (1966) apparently were influenced by Klebs's suggestion that at least some of the copals in the Coburg collection may have been of Oriental origin. In fact Klebs (1910) tentatively identified Giebel's Gekko as an Oriental species. On the other hand, Edwards (1932), with characteristic serendipity, had suggested East Africa as the probable source at least of *C. loewi*, although he guessed its identity wrongly. Hennig (1966) identified nine of Giebel's insect taxa and reported them all to be definitely or possibly African in origin. For two specimens belonging to taxa that could have originated from either the Ethiopian or the Oriental regions Hennig (*in lit.*, 21.vi.1968) was able subsequently to furnish the results of spectroscopic analysis of the copals performed at the University of California, Santa Cruz, by Dr. Jean H. Langenheim (*in lit.*, 16.v.1968): "it is clear that the samples of copal containing *Lomatia* and *Tachina* ... are from a leguminous source. In fact, the resin probably is from a species of *Trachylobium* which occurs in East Africa ... It is somewhat similar to *Copaifera* which produces the West African copals. However, resin from *Trachylobium* appears more similar than those from *Copaifera*". In the light of this technical information, there can be no doubt as to the correct synonymy of *C. loewi* Giebel with the common African mosquito that has always been known as *Toxorhynchites brevipalpis* Theobald.

8. For the above reasons and in the interest of nomenclatural stability the International Commission on Zoological Nomenclature is asked:

(1) to exercise its plenary powers to suppress the specific name *loewi* Giebel, 1862, as published in the combination *Culex loewi*, for the purposes of the Law of Priority but not for the purposes of the Law of Homonymy.

(2) to place on the Official Index of Rejected and Invalid Specific Names in Zoology the specific name *loewi* Giebel, 1862, as published in the binomen *Culex loewi* and as suppressed under the plenary powers in (1) above.

9. This case would have been impossible to formulate without the generous access to personal correspondence allowed me by Dr. R.W. Crosskey, Prof. Dr. W. Hennig and Dr. P.F. Mattingly. Their assistance and the spectroscopic information on copals supplied by Dr. J.H. Langenheim of California is gratefully acknowledged.

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STROMATOPORELLA NICHOLSON, 1886 (FOSSIL ORDER STROMATOPOROIDEA): PROBLEM OF THE TYPE—SPECIMEN OF THE TYPE—SPECIES, *STROMATOPORELLA GRANULATA* (NICHOLSON), 1873, Z.N.(S.)2177

By Joseph St. Jean, Jr. (*Department of Geology, University of North Carolina, Chapel Hill, North Carolina, 27514, U.S.A.*)

The International Commission on Zoological Nomenclature is hereby petitioned to exercise its plenary powers to suppress the original syntype specimens of *Stromatoporella granulata* (Nicholson), 1873, from the "Corniferous Limestone (Devonian) of Port Colborne and Savage's Quarry, Wainfleet, on the north shore of Lake Erie, Canada West" (Nicholson, 1873, p. 94, pl. 4, figs. 3, 3a) in favor of a specimen later used by the original author to redescribe and to re-illustrate *Stromatoporella granulata.* Nicholson's later described specimen came from younger strata, the Middle Devonian Hamilton "Formation" (now considered a stratigraphic group) and was collected from Arkona, Ontario, a substantial distance--208 km (130 mi)--from the original type locality (Nicholson, 1886a, pl. 1, figs. 4, 5, 15 [not fig. 14] pl. 7, figs. 5, 6; 1891, p. 202; 1892, p. 203, 204, pl. 26, figs. 1, 1a, 1b). This Arkona specimen is specimen number 329, accompanied by microscope slides 329a-329f, in the H.A. Nicholson Stromatoporoid Collections in the Department of Invertebrate Palaeontology, British Museum (Natural History), London. The Commission is petitioned to designate the above mentioned Arkona specimen as a neotype under its plenary powers, because the specimen does not meet the qualifications of a neotype [Art. 75(c) (5)] — it does not come from the type locality, the type stratigraphic horizon, or the original type collection.

2. H.A. Nicholson, in 1873, described and illustrated a new species, *Stromatopora granulata* from the "Corniferous Limestone" (now called the Onondaga Formation) of Port Colborne and from Savage's Quarry, Wainfleet, Ontario, Canada. The description is brief, it dwells mostly on surface coenostial characters and gives a general description of the gross coenostial reticulation formed by laminae and pillars. The figures consist of a crude illustration of a fragment of a coenosteum at natural size and a slightly enlarged lateral view of a fragment which only poorly illustrates the reticulum of the coenosteum. No mention is made of ring-pillars or skeletal tissue structure (which are diagnostic generic characters of the genus *Stromatoporella*) nor are ring-pillars or tissue illustrated. The original description and illustrations are inadequate to determine either the generic or the specific stromatoporoid characteristics in terms of present-day concepts. Nicholson did not indicate whether the figured specimens came from Port Colborne or Wainfleet, but the two localities are only about

10.4 km (6.5 miles) apart. The whole area is underlain by bedrock of Onondaga age. Some stratigraphers currently place the Onondaga Formation at the top of the Lower Devonian, others place it at the base of the Middle Devonian.

3. In 1874, Nicholson (p.10,11) described a fragment of a new specimen he assigned to *Stromatopora granulata* from the Hamilton Group in Bosanquet Township, Ontario, Canada, which is located in Lambton County, on Lake Huron, and includes the towns of Thedford and Arkona. As the Hamilton Group (middle Middle Devonian) is younger than the Onondaga Formation from which the original material came, the new specimen extended the stratigraphic range of the species from basal Middle to middle Middle Devonian. Nicholson augmented the original description by noting "oscula" and pores. These could be axial tubes of mamelons and the hollow centers of ring-pillars, but the description is too inadequate to be certain and no figures were included.

4. Nicholson and Murie, 1878 (pl. 1, figs. 12, 13) published the first figures of thin-sections of *Stromatopora granulata*. The figures illustrated ring-pillars for the first time. Nicholson subsequently considered ring-pillars to be one of the diagnostic characteristics of the genus *Stromatoporella*. Nicholson and Murie also illustrated a portion of the surface of a specimen with a single astrorhiza (*op. cit.*, pl. 1, fig. 11). This figured specimen of *Stromatopora granulata* by Nicholson and Murie is not from type material, but comes from the Hamilton Group of Ontario, Canada, with no precise locality given. No description was included in the article, therefore the presence of ring-pillars is determinable only by examination of the illustrations.

5. In 1886, Nicholson (1886a, p. 92-95) named the new genus *Stromatoporella* and designated *S. granulata* (Nicholson), 1873 as the type species (*op. cit.*, p. 94). He mentioned that *S. granulata* is "...abundant in the Hamilton and Corniferous formations of Western Canada". Nicholson considered ring-pillars, which he called zoöidal tubes, "peculiar" to the genus and noted (p. 93) that zoöidal tubes were characterized in tangential section by "complete or incomplete rings". The fact that ring-pillars are present is also indicated in the supporting illustrations of a specimen from the Hamilton Group of Ontario (*op. cit.*, pl. 1, figs. 4, 15, pl. 7, figs. 5, 6).

6. In another work published the same year (1886b, p. 10, 11) Nicholson redescribed *S. granulata* and noted "...close-set tubercles of various sizes, the smaller of these being imperforate, while the larger ones are perforated at their apices by distinct circular apertures". Nicholson noted pillars, often in the form of a ring, which he interpreted as the perforate tubercles he described on the coenostial surface. He did not illustrate any specimens in this work, but he noted again the occurrence of the species from the Hamilton beds at Arkona, Ontario and the "Corniferous" limestone of Port Colborne. Only gallery height was given, so that the diagnostic species-characteristics are insufficient to establish the nature of

S. granulata, but it is clear from his description that what Nicholson then considered to be *S. granulata* from the type area and horizon must have had ring-pillars, and a skeleton composed of minute pores and an incomplete reticulum.

7. Attention must be drawn to Nicholson's diagnostic generic emphasis on the ring-like structure because several modern authors have overlooked this important generic structure noted in Nicholson's original generic and subsequent descriptions and illustrations of *Stromatoporella.* Most authors in the past have considered *Stromatoporella* to possess ring-pillars (i.e. Parks, 1936, p. 39; Yavorsky, 1943, p. 369; 1950, p. 243; 1962, p. 163; Galloway, 1957, p. 436; Stearn, 1966, p. 93; Kaźmierczak, 1971, p. 86; 1971, p. 51; Zukalová, 1971, p. 51; etc.). However, a few authors have disregarded ring-pillars as a generic character and have included some species in *Stromatoporella* which would be better placed in other genera (i.e. Lecompte, 1951, p. 152; 1956, p. F131; Sleumer, 1968; 1969, p. 37-42). We must rely, however, on the intention of the original generic description. Part of the confusion concerning the generic character of *Stromatoporella* is based on the morphological interpretations of specimens which do not belong to the type-species.

(a) For example, in 1936, Parks (p. 94, 98, 99) interpreted ring-pillars in *Stromatoporella* as inflected laminae in vertical section and as large pores in tangential section. However, Parks complicated the issue (p. 77) by naming a new genus, *Stictostroma* based on "cogenotypes". One genotype, *Stromatopora mammillata* Nicholson, 1873 proved to be a homonym of *Stromatopora mammilata* Schmidt, 1858. *Stictostroma mammillatum* of Parks has a microtissue like *Stromatoporella,* but lacks ring-pillars. Parks's second "cogenotype" was a new species, *Stictostroma eriense,* with extremely well developed ring-pillars (*op. cit.*, p. 81-83, pl. 5, figs. 1-4). Later, Galloway and St. Jean (1957, p. 124) renamed Nicholson's species *Stictostroma mammilliferum*, and selected it as the type species of *Stictostroma* placing *S. eriense* Parks in the genus *Stromatoporella.*

(b) Lecompte (1951, p. 152-158) wrote a detailed historical account of *Stromatoporella* in which he concluded that ring-pillars were not of generic importance. As a consequence, he placed *Stictostroma* in synonymy with *Stromatoporella,* thereby including many forms without ring-pillars in *Stromatoporella.* His interpretation was in part based on Parks's inclusion of ring-pillar-bearing and non-ring-pillar-bearing species in *Stictostroma* as well as on Parks's interpretation of ring-pillars as inflected laminae.

(c) Finally, Sleumer (1968; 1969, p. 37-42, pls. 24-27) following Lecompte, placed specimens clearly belonging to three or four other genera in the species *Stromatoporella granulata.* In his re-evaluation of *S. granulata* Sleumer paid little attention to the type description of either the genus *Stromatoporella* or the species *S. granulata* in his interpretations.

8. The real problem concerning the nature of the type-specimen, and therefore the nature of the type-species of the genus, is that later Nicholson

(1891-1892, p. 202-204) re-evaluated his species *Stromatoporella granulata*. He selected and illustrated a specimen of Hamilton age from Arkona, Ontario (British Museum (Natural History), Nicholson Collection, specimen number 329) to represent the species. He then implied that *S. granulata* was restricted to the Hamilton Group, even though the original type-material came from older beds of Onondaga age in the Port Colborne area, about 208km (130 mi) from Arkona. He called the specimens of *Stromatoporella* from the Port Colborne area (i. e. from the original type locality and horizon of *S. granulata*) a new species, *Stromatoporella selwynii* (1892, p. 205, 206, British Museum (Natural History), Nicholson Collection, Specimen Numbers 330 and 331) whose distribution is "not uncommon in the Corniferous Limestone of Port Colborne, Ontario". His restriction of *Stromatoporella granulata* to the Hamilton beds thus deprived the type specimens (from the Onondaga Formation) of their original taxonomic designation. Such an arbitrary nomenclatural exclusion of the type-specimens is contrary to the present-day International Code of Zoological Nomenclature.

9. The location of the original type-material of *Stromatoporella granulata* is not now known. During the time from the first publication of *S. granulata* until his death, Nicholson was associated with the University of Toronto in Ontario, Canada and St. Andrews and Aberdeen Universities in Scotland. A large portion of Nicholson's collections was placed in the British Museum (Natural History) in London. Dr. John Monteith of the Royal Ontario Museum in Toronto, Dr. N.H. Trewin of the Department of Geology and Mineralogy, University of Aberdeen Marischal College, and Dr. A.R. MacGregor of the University of St. Andrews in Scotland have all searched their collections for the original type specimen of *Stromatoporella granulata* (Nicholson), without success. A possibility exists that the type specimen of *S. granulata* was later used by Nicholson for the type specimen of *S. selwynii,* because they both came from the same geographic area and the same stratigraphic horizon. I have examined the slides of both *S. granulata* (Nicholson), as redesignated in 1891-1892, and *S. selwynii* Nicholson, in the collections of the British Museum (Natural History) as well as Nicholson's notebook, written in his own hand. The slides, the accompanying labels, and Nicholson's notebook contain no indication that the type-specimen of *S. selwynii* was the original type-specimen of *S. granulata*. Further, Mr. Richard F. Wise, of the British Museum (Natural History), made a recent search of Nicholson's unsectioned specimens and could not find the type-specimen. He found no evidence that *S. selwynii* is one and the same specimen as the type of *S. granulata.* Also, in comparing the type figure of *S. granulata* (Nicholson, 1873, pl. 4, fig. 3) with the specimens in the Museum's collections, Mr. Wise could not find any specimen to match the original figure. In view of the above, we can consider the original type-material of *S. granulata* (Nicholson) lost.

10. In my own collections from the Port Colborne area, the majority of specimens belong to different species of *Stromatoporella* and *Stictostroma,* but most of them do not agree specifically with Nicholson's identifications from the Hamilton group at Arkona. I found only one specimen of *S. granulata* from the type-horizon and locality at Port Colborne (St. Jean, 1960, p. 276, text-fig. 2). The problem is that, even though some of the newly collected material may indeed be conspecific with the original type specimens of *S. granulata* from the Onondaga Formation at Port Colborne, there is no way of actually knowing because Nicholson never described or illustrated in sufficient detail a specimen from the type-horizon and locality which he himself assigned to *S. granulata.* In addition, no subsequent author who may have seen the original type-specimens has described *S. granulata* from the type area and horizon.

11. Obviously in naming the new genus *Stromatoporella* with the subsequently restricted and redesignated *S. granulata* as the type, Nicholson had in mind the Arkona specimens rather than the type-specimens from Port Colborne, for the Arkona specimens were used to illustrate the genus (1886, pl. 1, figs. 4, 5, 15, pl. 7, figs. 5, 6) with the exception of the coenosteum of one Port Colborne specimen (*op. cit.*, pl. 1, fig. 14) which Nicholson later assigned to *S. selwynii* (1891, p. 202). By 1891 and 1892, five or six years after the publication of *Stromatoporella,* he thought of *S. granulata* as being restricted to the Hamilton Formation (i.e., 1892, p. 203) "Having now fully examined my available material, I have come to the conclusion that the Devonian rocks of North America contain two allied but nevertheless really distinct species of *Stromatoporella,* which up till now I have included under the single name of *S. granulata.* One of these — the true *S. granulata* — occurs in the Hamilton formation, and I have supplemented the figures of its microscopic structures with a drawing of an actual specimen (Plate XXVI, fig. 1). The other form in question occurs in the Corniferous Limestone of Canada; and I shall briefly describe it under the name of *S. Selwynii,* Nich.".

12. With regard to the problem of the type-specimen of the type-species of *Stromatoporella*, three courses of action are possble.

(a) The simplest action would be to select a specimen from the type area and stratigraphic horizon, and designate it a neotype. In view of the fact that a wide variety of interpretations have been placed on *Stromatoporella* recently (see 7 above) and in view of the fact that several species of both *Stictostroma* and *Stromatoporella*, as well as other genera occur in the area, a neotype would reflect the subjective interpretations of the collector rather than Nicholson's original intent.

(b) One could take some of the unsectioned specimens in the Nicholson collection at the British Museum (Natural History), have sections prepared, and designate one of them as the type. However, due to the fact that the internal characters of these specimens have never been known, not even to Nicholson, the same prejudicial judgements would come into play.

(c) The best alternative is to have the Commission suppress the original type-specimens of *Stromatoporella granulata* and recognize the specimen no. 329 (slides 329 a-f) in the British Museum (Natural History) as the neotype. This specimen was used by Nicholson to describe *Stromatoporella* for the first time and it reflects the author's original intent with respect to at least generic-level considerations.

13. The request to suppress the type-specimens even though they are lost is due to the fact that morphological details of specimen number 329 are well known. The important characteristics of the type-specimens have never been known, except perhaps to Nicholson, and perhaps not even very well known to him. If for some unexpected reason the type-specimens are located, a knowledge of their detailed generic and specific characters would be apt to upset a nomenclatural stability which has existed at least from Nicholson's re-evaluation of the species in 1891 and 1892.

14. In making the decision the Commission should keep in mind the following factors:

(a) In 1873 Nicholson named a new species *Stromatopora granulata* from Onondaga deposits near Port Colborne, Ontario.

(b) In 1874, Nicholson described *Stromatopora granulata* from the younger Hamilton beds near Arkona, Ontario.

(c) In 1886, Nicholson named the new genus *Stromatoporella* and designated *Stromatoporella granulata* as type-species.

(d) In 1891, Nicholson split off a new species, *Stromatoporella selwynii* (Onondaga, Port Colborne, lower Middle Devonian) and retained the name *Stromatoporella granulata* for the Arkona specimens, restricting *Stromatopora granulata* to Hamilton age deposits (middle Middle Devonian).

(e) The original type specimens from Onondaga were eventually lost. Their descriptions and illustrations are inadequate for generic and specific identifications. Recent collections have been made from the type-area and horizon (Onondaga) but it is impossible to determine if any are conspecific with the original *Stromatopora granulata*.

(f) The existing confusion in morphological interpretations reflects the need and urgency to designate a new type specimen of *Stromatopora granulata* about whose legitimacy there can be no doubt. The validation of the proposed neotype number 329, in the Nicholson collection in the British Museum (Natural History) should clear up some of the confusion about the genus *Stromatoporella* and its type species *Stromatopora granulata*.

(g) The proposed neotype specimen reflects the author's original intent better than any other specimen available.

(h) The proposed neotype specimen has been for nearly a century in a famous repository, under exceptionally competent curatorial care, and is accessible to the majority of world scientists who may be interested in the genus and species in question.

15. The Commission is therefore asked:
   (1) to use its plenary powers to suppress all designations of type-specimen for the nominal species *Stromatopora granulata* Nicholson, 1873 hitherto made and to designate specimen No. 329 in the British Museum (Natural History), London, with the slides 329a-329f prepared from it as neotype of that species;
   (2) to place the generic name *Stromatoporella* Nicholson, 1886 (gender: feminine), type-species, by original designation, *Stromatopora granulata* Nicholson, 1873 (as defined by the neotype designated under the plenary powers in (1) above) on the Official List of Generic Names in Zoology;
   (3) to place the specific name *granulata* Nicholson, 1873, as published in the binomen *Stromatopora granulata*, and as defined by the neotype designated under the plenary powers in (1) above (specific name of type-species of *Stromatoporella* Nicholson, 1886) on the Official List of Specific Names in Zoology.

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REVISED PROPOSALS CONCERNING THE VALIDATION OF *DITYLENCHUS* FILIPJEV, 1936 (NEMATODA). Z.N.(S.) 1955

By the *Secretary, International Commission on Zoological Nomenclature*

In December 1971 Dr. P.A. Loof (*Landbouwhogeschool, Wageningen, Netherlands*) and Dr. S.A. Sher (*University of California, Riverside*) published an application for the validation of the generic name *Ditylenchus* Filipjev, 1936 (Nematoda) by the suppression of *Chitinotylenchus* Micoletzky, 1922 (*Bull. zool. Nomencl.* vol. 28:112-113). *Ditylenchus* is widely used, not only in taxonomic, but also in agricultural and economic literature, for nematodes of economic importance: *D. dipsaci* (the type-species), the stem nematode; *D. destructor,* the potato-rot nematode; *D. angustus,* causing ufra disease in rice. *Chitinotylenchus* has been used for four species only doubtfully referred to the genus, of which the type-species, *C. paragracilis* Micoletzky, 1922, has never been reported since its first description. The synonymy of the two generic names is based on a re-examination by Sher, 1970 (*J. Nematol.* vol. 2: 236-238) of the holotype female of *C. paragracilis* which, though flattened, is in fair condition.

2. In 1974 (*Bull.* 31: 110-111) Dr. Lemche added a clause to complete the detailed proposals to the Commission; and Dr. Loof provided 12 references to works by different authors since 1969 in which *Ditylenchus* had been used as a valid name. The application was suppoted by Dr. David Hooper (*Rothamsted Experimental Station*).

3. In June 1975, the Commission was invited to vote on this application and supported it by 19 votes to 1. The Opinion has not been prepared because Dr. Dupuis, who voted for postponing a decision on the following grounds, said: "La nécessité de conserver *Ditylenchus* ne fait aucun doute, mais la proposition de supprimer *Chitinotylenchus* ne repose que sur une synonymie subjective, établie par *un* helminthologiste. Avant de décider cette suppression, j'estime qu'il faut consulter d'autres spécialistes des nématodes des plantes et notamment: Michel Luc, *Muséum national d'Histoire naturelle, Paris;* M.R. Siddiqui, *Commonwealth Institute of Helminthology, St Albans;* I. Andrassy, *Egyetemi Allatrendszertani Intezet, Budapest.*" Dr. Mroczkowski, who abstained from voting, also thought that the case for regarding the respective type-species of *Ditylenchus* and *Chitinotylenchus* as congeneric had not been sufficiently made.

4. I accordingly wrote to the gentlemen named by Dr. Dupuis and asked for their advice on whether the Commission should preserve *Ditylenchus* by suppressing *Chitinotylenchus*, or by ruling that the junior name should be given precedence over the senior one by any zoologist who held both names to denote one taxon. My letter made it clear that advice was sought not on the end to be attained, but on the better of two alternative routes to it. The following replies were received:

Dr. Siddiqui: "I think the two genera are not synonymous for reasons given below. It should be noted here that the holotype specimen is the only known specimen of *Chitinotylenchus paragracilis* and is flattened although in fair condition, and that Sher (1970) based his proposed synonymy on the examination of this specimen only when he said: 'appears to me to belong in the genus *Ditylenchus* Filipjev, 1936, as the only known specimen exhibits all the characters (as far as can be seen) of that genus'.

"(a) The genus *Ditylenchus* (type-species *D. dipsaci* (Kuhn, 1857), Filipjev, 1936) is a large group of species requiring a careful revision. Golden (1971, in *Plant Parasitic Nematodes,* vol. 1, edit. Zuckerman, Mai & Rohde, Academic Press) expresses his opinion about the type-species as 'Many of the 30 or more synonyms of *D. dipsaci* may prove to be valid species when further studied'.

"A revision of the group may reveal that the species in *Ditylenchus* represent more than one genus. A recently proposed genus, *Diptenchus* Khan and others, 1969, has been differentiated from *Ditylenchus* by its (1) differently shaped posterior oesophageal bulb, and (2) absence of a post-vulval uterine sac. Khan and others placed *Diptenchus* under TYLENCHIDAE (near *Ditylenchus*), Siddiqui (1971, *Indian J. Nematol.* vol. 1: 25-43) under ANGUININAE next to *Ditylenchus*, and Golden (1971) placed it in his new subfamily DITYLENCHINAE.

"In *D. dipsaci* a long post-vulval uterine sac ending in a rudiment of a posterior gonad is present. This feature has not been commented upon by Sher (1970) for *C. paragracilis*, but his illustrations A and C on : 237 show that a post-vulval sac is absent. In this respect, *Chitinotylenchus* resembles *Diptenchus* and differs from *Ditylenchus*.

"(b) *Chitinotylenchus paragracilis* has, according to Sher (1970) 'Stylet moderately developed; knobs elongated, sloping and separated distally'. This description of the stylet is closest to 'stylet with furcate base' which is depicted in Sher's figure 1B and can be regarded as a generic character for *Chitinotylenchus*, as has been done for a long time. The stylet in *Ditylenchus dipsaci* is also moderately developed, but it has rounded, non-sloping basal knobs which are placed close together without even a notch at the base. The stylet in *Diptenchus,* on the other hand, is weakly developed, with inconspicuous knobs in the form of slight thickenings. Thus the stylet base is of a different type in each of the three genera.

"(c) The holotype of *C. paragracilis* has, according to Sher, 'ovary single, details obscure'. Thus it is not clear whether the ovary is of the *Ditylenchus*-type (simple with a row of oocytes) or of the *Anguina*-type (multiple rows of oocytes arranged about a rachis).

"(d) The tail of the holotype of *C. paragracilis* as illustrated by Sher (1970) shows a long, hyaline, non-protoplasmic terminal portion which is unusual for *Ditylenchus*.

"(e) It is difficult to identify *Chitinotylenchus* with *Ditylenchus* when information on the following is lacking:

(i) Head-on view, and (ii) Male tail, for differentiation from insect-parasites *Sychnotylenchus* and *Neoditylenchus;*

(iii) Uterus, spermatheca, ovary and sperms, to ascertain its relationship

with *Ditylenchus* and members of TYLENCHIDAE. Geraert & Kheiri (1970, *Nematologica* vol. 16: 197-202) have shown that *Pseudhalenchus* Tarjan, 1958, is very similar to *Ditylenchus*. Its type-species, *P. anchilisposomus* has a female gonad which is structurally similar to that of *Ditylenchus*, whereas its other species, *P. minutus*, has a gonad which resembles that of *Tylenchus* (TYLENCHIDAE);

(iv) Cuticular lateral fields, number of incisures, presence of deirids, etc. These are always helpful in ascertaining the taxonomic position of tylenchid genera.

"For these reasons it seems justified to reject Sher's (1970) proposed synonymy of *Chitinotylenchus* with *Ditylenchus* and to recognise them as separate genera. The genus *Ditylenchus* will then not be threatened and there will be no need to apply for its protection. *Chitinotylenhchus*, it is urged, should not be suppressed by the Commission but should continue to be used by those zoologists who believe that it denotes a different genus from *Ditylenchus*.

"I propose, as a result of your letter, to publish a note to the effect that Sher's proposal to classify *C. paragracilis* as *Ditylenchus* is unacceptable."

Monsieur Luc: "L'examen du travail de Sher montre que, sans ambiguité, les deux genres *Ditylenchus et Chitinotylenchus* sont identiques. D'autre part, le nom du premier étant de loin le plus connu et, surtout, s'appliquant à plusieurs espèces économiquement importantes et mondialement répandues, il est à mon avis essentiel de le conserver. Je suis donc tout à fait en faveur de la protection du nom de genre *Ditylenchus*. Je pense de plus que la situation serait beaucoup plus claire si le nom de *Chitinotylenchus* était complètement supprimé, suivant en cela l'opinion de Sher et de Loof."

Professor Andrassy: "I know well the paper of Sher in which he proposed to synonymise *Chitinotylenchus* with *Ditylenchus*. Sher - who is a very eminent scientist indeed - investigated the type-specimen (a single female) of *C. paragracilis* Micoletzky, 1922 and found it to be very similar to species of *Ditylenchus*. He said: 'The holotype specimen of *C. paragracilis* appears to me to belong in the genus *Ditylenchus*.... The bifurcated stylet is not too different from stylets seen in the genus *Ditylenchus*' (the bifurcation of the stylet would be the most important generic character differentiating the two genera).

"What does this mean? And what can we see in Sher's drawings? Only that *C. paragracilis* is similar to the species of *Ditylenchus* and probably belongs to them, but not more. The conclusion is not certain. First, Micoletzky's specimen is only in a relatively fair condition (it is flattened and cleared); secondly, it is a single female and we do not know any males of this species, although the characteristics of the male would be of great importance precisely in the systematics of this group of Tylenchida.

"My standpoint is therefore as follows: from the original description and the single flattened holotype, and from the lack of males, we cannot characterise the species *C. paragracilis* Micoletzky, 1922 as a valid species, or the genus *Chitinotylenchus* Micoletzky, 1922 as a valid genus. Until the species has been redescribed on the basis of both male and female topotypes, we can regard Micoletzky's species and genus only as *species inquirenda* and *genus inquirendum*, with a possible note that they belong perhaps to *Ditylenchus*.

"It is worth mentioning that the other four species described in or transferred to *Chitinotylenchus* are, in Sher's opinion, *species inquirendae*."

5. In the face of these three independent pieces of advice, it seems to me clear that the Commission ought to reconsider the question, and to vote, first, whether or not to use the plenary powers in this case. If the Commission declines to use its plenary powers, *Chitinotylenchus* will become the valid name for the genus now known to taxonomists and agricultural scientists as *Ditylenchus* - the opposite of the end sought by all who have contributed to the discussion so far.

6. If the Commission decides to use the plenary powers, it should then be offered a choice between two alternatives: either A, to reaffirm its former decision and suppres *Chitinotylenchus* (i.e. to adopt the proposals published in *Bull. zool. Nomencl.* vol. 28: 112-113 and vol. 31: 110), or, B:

(1) to use its plenary powers to rule that the generic name *Ditylenchus* Filipjev, 1936 is to be given precedence over the generic name *Chitinotylenchus* Micoletzky, 1922, by any zoologist who believes both names to denote the same taxon;

(2) to place the generic name *Ditylenchus* Filipjev, 1936 (gender: masculine), type-species, by original designation, *Anguillula dipsaci* Kuhn, 1857, on the Official List of Generic Names in Zoology with the endorsement specified in (1) above;

(3) to place the generic name *Chitinotylenchus* Micoletzky, 1922, (gender: masculine), type-species, by subsequent designation by Filipjev, 1936, *Chitinotylenchus paragracilis* Micoletzky, 1922, on the Official List of Generic Names in Zoology, with an endorsement that it is not to be given precedence over the generic name *Ditylenchus* Filipjev, 1936, by any zoologist who believes that both names denote the same taxon;

(4) to place the following specific names on the Official List of Specific Names in Zoology:

(a) *dipsaci* Kuhn, 1857, as published in the binomen *Anguillula dipsaci* (specific name of type-species of *Ditylenchus* Filipjev, 1936);

(b) *paragracilis* Micoletzky, 1922, as published in the binomen *Chitinotylenchus paragracilis* (specific name of type-species of *Chitinotylenchus* Micoletzky, 1922).

REQUEST THAT THE INTERNATIONAL COMMISSION RULE TO SUPPRESS FOWLER'S LECTOTYPE DESIGNATIONS OF *ALBURNOPS PLUMBEOLUS* COPE, 1865 AND *HYPSILEPIS CORNUTUS CERASINUS* COPE, 1868 (PISCES, CYPRINIDAE) Z.N.(S.) 2154

By Carter R. Gilbert (*The Florida State Museum, University of Florida, Gainesville, Florida 32611, U.S.A.*)

Recently (1971, *Bull. Zool. Nomencl.*, vol.28 (5-6): 173-175), I submitted a petition to the International Commission on Zoological Nomenclature, asking that various lectotype designations (mostly involving species of North American cyprinid fishes) proposed by Fowler (1909, *Proc. Acad. nat. Sci. Philad.* [1908], vol. 60: 517-553; 1910, *Proc. Acad. nat. Sci. Philad.*, vol. 62: 273-293, pls. 15-21; 1918, *Occ. Pap. Mus. Zool. Univ. Michigan*, vol. 60: 1-51, pls. 1-13) be suppressed. The reasons for this request centred both around the ambiguous nature of these designations and the fact that for two species (*Alburnops plumbeolus and Hypsilepis cornutus cerasinus*) the lectotypes selected represent species obviously different from those upon which the original descriptions were based.

2. Collette and others (1972, *Bull. Zool. Nomencl.*, vol. 29 (4): 198) subsequently recommended that this petition be denied on the grounds that each case should be evaluated on its own merits, and that wholesale rejection of Fowler's lectotypes would serve no useful purpose in those situations in which nomenclatural complications were not involved. They further stated that they likely would support a well-documented request to suppress those lectotype designations resulting in unwarranted name changes, and specifically mentioned *Hypsilepis cornutus cerasinus* in this regard. A letter was received by me from the Secretariat of the Commission, indicating that Collette et al's recommendation would be followed. The present petition, which is intended as a substitute for the above, is to request that Fowler's lectotype designations for *Alburnops plumbeolus* Cope, 1865, and *Hypsilepis cornutus cerasinus* Cope, 1868, be suppressed. The dates of publication of these names were analysed by Gilbert, 1971, *Copeia* (1971), No. 3: 474-479.

3. Of the seven specimens comprising the syntypic series of *Alburnops plumbeolus* Cope, 1865, *Proc. Acad. nat. Sci. Philad*, for 1864, vol. 16: 276-285 (ANSP 2055-2061), six are *Notropis chrysocephalus* (Rafinesque, 1820), and the seventh is *Notropis heterodon*(Cope, 1865). It is important to note here that the latter species was first described (as *Alburnops heterodon*) in the same paper as *A. plumbeolus* (Cope, 1865, *Proc. Acad. nat. Sci. Philad.*, vol. 16: 276-285). The original description of *A. plumbeolus* stressed pharyngeal-tooth and anal fin-ray counts (2,4-4,2 and 9, respectively), both of which are diagnostic of *Notropis chrysocephalus* but not *N. heterodon* (for which the same counts are usually 1,4-4,1 and 8). No mention was made of a distinct black lateral stripe, a feature characteristic of *N. heterodon* but not *N. chrysocephalus*, although this character was prominently mentioned in the original description of *Alburnops heterodon*. There can be no doubt that Cope's description of *Alburnops plumbeolus* was based on the species now called *Notropis chrysocephalus*.

4. Fowler's (1910: pl. 18, fig. 30) drawing of the "type" of *Alburnops plumbeolus* is calculated to be 44.2 mm standard length, which is very close to the actual length (43.7 mm SL) of the largest syntype (i.e., the specimen of *Notropis heterodon*), and several millimetres longer than any of the remaining syntypes (all *Notropis chrysocephalus*), the largest of which is 40.5 mm SL. This becomes especially significant when one considers that (a) Fowler habitually drew the largest specimen in a series, and (b) the illustrations appearing in Fowler's 1910 paper are remarkably accurate so far as body length is concerned. Furthermore, the figure of *A. plumbeolus* clearly shows eight anal rays, whereas all six specimens of *N. chrysocephalus* in the syntypic series have nine. It seems obvious that the drawing in question was based on the individual of *N. heterodon*.

5. Forty-three syntypes of *Hypsilepis cornutus cerasinus* Cope, 1868, *Proc. Acad. nat. Sci. Philad.* for 1867: 159 (ANSP 3791-3833) are present, of which nine are *Notropis cerasinus* (as presently understood), and the remaining 34 are closely related *Notropis albeolus*. Despite the predominance of the latter species in the type-series, Cope's original description obviously applies to *N. cerasinus*, as indicated by his reference to a form of "rather small size" (the largest known specimen of *N. cerasinus* is only 87.5 mm standard length, versus a maximum size of 130mm for *N. albeolus*); the deep rose and brilliant crimson colour on the body and lower fins, respectively (these colours are much more subdued in *N. albeolus*); and 16 scales in front of the dorsal fin (usually from 20 to 22 in *N. albeolus*). The specimen illustrated by Fowler (1910: pl. 18, fig. 31) is calculated to be 99 mm standard length, which is close to the size of the largest specimen of *N. albeolus* in the type series (97.5 mm SL), but substantially larger than the largest syntype of *N. cerasinus* (73 mm SL). Fowler's drawing of *Hypsilepis cornutus cerasinus* clearly was based on a specimen of *N. albeolus*.

6. Fowler's (1910) treatments and illustrations of *Alburnops plumbeolus* and *Hypsilepis cornutus cerasinus* fulfil the requirements for lectotype designations, according to Article 74b of the International Code of Zoological Nomenclature. Should these lectotypes be allowed to stand, unfortunate and unnecessary name changes would result. The specific name *cerasinus*, which has long been associated with the Crescent shiner (*see* Bailey et al, 1970, *Amer. Fish. Soc. Spec. Publ.*, No. 6: 21), would now apply to the White shiner, *Notropis albeolus* Jordan, 1889, and a new name would be required for the former. Inasmuch as *Alburnops plumbeolus* and *Alburnops heterodon* were described in the same paper, it is conceivable that the former name could supplant the latter, depending upon the action of the first reviser.

7. In 1964 (*Bull. Fla. St. Mus. biol. Sci.* vol. 8(2): 95-194) I designated lectotypes for both *Hypsilepis cornutus cerasinus* (p.137) and *Alburnops plumbeolus* (p.160), this being done before the implications of Fowler's 1910 paper were apparent. Although different lectotype speciments from Fowler's obviously are involved, the catalogue numbers are the same (*H. c. cerasinus*, ANSP 3791; *A. plumbeolus*, ANSP 2055). Because Fowler's designations appeared first, the above numbers logically should be reserved for his specimens, and new numbers must necessarily be assigned to mine. I therefore

propose that the 73.0 mm SL specimen selected by me as lectotype of *H. c. cerasinus* be recatalogued as ANSP 3833; the paralectotypes would retain the catalogue numbers ANSP 3792-3799, and the remaining syntypes, which are recatalogued as *Notropis albeolus*, would be assigned the numbers ANSP 3791 (97.5 mm specimen) and 3800-3832. For *A. plumbeolus*, the 40.5 mm SL specimen selected by me should be recatalogued as ANSP 2061, the paralectotypes would retain the numbers 2056-2060, and the specimen of *Notropis heterodon* (Fowler's lectotype) would become ANSP 2055.

8. In summary, evidence is presented to show that lectotypes designated by Fowler (1910) for two forms of North American cyprinid fishes (*Alburnops plumbeolus* and *Hypsilepis cornutus cerasinus*) represent species different from those on which the original descriptions were based. Should these designations be accepted, specific name changes would be required for two species (*Notropis cerasinus* and *Notropis albeolus*), and a third species (*Notropis heterodon*) would be subject to change, depending upon the action of the first reviser. Inasmuch as such changes are totally unnecessary and inappropriate, and are not in line with presently accepted taxonomic practices, I hereby request the International Commission:

(1) to use its plenary powers to suppress the lectotype designation made by Fowler (1910) for the nominal species-group taxa *Alburnops plumbeolus* Cope, 1865 and *Hypsilepis cornutus cerasinus* Cope, 1868;

(2) to place the following species-group names on the Official List of Specific Names in Zoology with the endorsements specified:

(a) *plumbeolus* Cope, 1865, as published in the binomen *Alburnops plumbeolus* and as defined by the lectotype designated by Gilbert, 1964;

(b) *cerasinus* Cope, 1868 as published in the combination *Hypsilepis cornutus cerasinus* and as defined by the lectotype designated by Gilbert, 1964.

9. This application is supported by Dr. B.B. Collette and Dr. W.R. Taylor, co-chairmen of the nomenclature committee of the American Society of Ichthyologists and Herpetologists.

CHLOROPHIS CARINATUS ANDERSSON, 1901, PROPOSED NOMENCLATURAL PRECEDENCE OVER *PHILOTHAMNUS NIGROFASCIATUS* BUCHHOLZ AND PETERS, 1875, ITS SENIOR SUBJECTIVE SYNONYM. (REPTILIA; COLUBRIDAE) Z.N.(S.) 2174.

By Barry Hughes (*University of Ghana, Legon, Ghana*)

The harmless African Green Snakes of the genus *Philothamnus* were last reviewed by Loveridge (1958) who listed *nigrofasciatus* Buchholz and Peters in the synonymy of *Philothamnus semivariegatus nitidus* (Günther, 1863). In the course of a new revision of *Philothamnus* Smith, 1840 (with which *Chlorophis* Hallowel, 1857, was synonymised by Loveridge, 1951: 189), the type of *nigrofasciatus* was studied in the Zoologisches Museum, Humboldt Universität, Berlin (where it is numbered 8320) and found to agree with the description of Buchholz and Peters except that the anal scale is entire, not divided. However, the type of *nigrofasciatus* is not a specimen of *nitidus* Günther nor of *semivariegatus* Smith (1847), but of *Chlorophis carinatus* Andersson, 1901. Since Andersson established the name, *carinatus* has been used in the combination *Chlorophis carinatus* on 27 occasions in 18 journals by 15 different authors (cited by Loveridge, 1958: 60), and since Loveridge (1951a) in the combination *Philothamnus heterodermus carinatus* on 8 occasions in 5 journals by 6 authors. In accordance with Article 79(b) of the Code approved by the XVII International Congress of Zoology, Monaco, in 1972, the following are a selection of "-at least 5 different authors and in at least 10 publications --" in which *carinatus* has been used during the past 50 years:

1. HECHT, G. 1929 *Zool. Anz.* vol. 81: 331.
2. WERNER, F. 1929 *Zool. Jahrb. Syst.* vol. 57: 100.
3. WITTE, G.F. de 1933 *Ann. Mus. Congo belge, Zool:* (1) vol. 3: 80.
4. SCHWETZ; J.1934 *Rev. zool. bot. Afr.* vol. 25: 380.
5. LOVERIDGE, A. 1936 *Fld Mus. nat. hist.* (*zool. ser.*) vol. 22: 28.
6. ———— 1936 *Bull. Mus. comp. zool. Harv.* vol. 79: 243.
7. PITMAN, C.R.S. 1936 *Uganda J.* vol. 3: 274.
8. BOGERT, C.M. 1940 *Bull. Amer. Mus. nat. Hist.* vol. 77: 51.
9. MERTENS, R. 1941 *Zool. Anz.* vol. 135: 278.
10. MONARD, A. 1951 *Mem. Inst. fr. Afr. noire* (1): 150.

2. Since its establishment *nigrofasciatus* Buchholz and Peters has been used on three occasions: by Matschie (1883: 212), Sjostedt (1897: 35) and Werner (1898: 209), but not once in this century. According to the Code, Article 23(a-b), *nigrofasciatus* should be referred to the Commission for a decision.

3. The International Commission on Zoological Nomenclature is therefore asked:-

(1) to use its plenary powers to rule that the specific name *carinatus*, as published in the combination *Chlorophis carinatus* Andersson, 1901,

is to be given nomenclatural precedence over the specific name *nigrofasciatus*, as published in the combination *Philothamnus nigrofasciatus* Buchholz & Peters, 1875, by any zoologist who considers that those names apply to the same zoological taxon. Having done so,

(2) to place the specific name *carinatus*, as published in the combination *Chlorophis carinatus* Andersson, 1901, on the Official List of Specific Names in Zoology, with the ruling that it has been granted nomenclatural precendence over *Philothamnus nigrofasciatus* Buchholz & Peters, 1875;

(3) to place the specific name *nigrofasciatus* Buchholz & Peters, 1875, as published in the binomen *Philothamnus nigrofasciatus*, on the Official List of Specific Names in Zoology, with an endorsement that it is not to be used in preference to the specific name *carinatus* Andersson, 1901, as published in the binomen *Chlorophis carinatus* by any zoologist who considers that both names apply to the same taxon.

4. I wish to acknowledge the advice and assistance generously given me by Dr. I.W.B. Nye, Member of the Commission.

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SJOSTEDT, Y. 1897. Reptilien aus Kamerun, West-Afrika. *Bihang. t. k. Svenska Vet. Akad. Hand.* vol. 23 (4): 1-36.

WERNER, F. 1898. Ueber Reptilien und Batrachier aus Togoland, Kamerun und Tunis aus dem kgl. Museum fur Naturkunde in Berlin II. *Verh.Zool. -bot. Ges. Wien* vol. 48: 191-213.

CALYMENE VARIOLARIS BRONGNIART, 1822 (TRILOBITA) : PROPOSED USE OF THE PLENARY POWERS TO DESIGNATE A NEOTYPE IN HARMONY WITH CURRENT USE. Z.N.(S.) 2189.

By R.P. Tripp (*British Museum (Natural History), London*), J.T. Temple (*Brikbeck College, London*) and K.C. Gass (*Milwaukee, U.S.A.*)

The object of the present application is to ask the International Commission on Zoological Nomenclature to use its Plenary Powers to designate the specimen figured by Murchison in 1839 (: 655, pl. 14, fig. 1) as neotype of *Calymene variolaris* Brongniart, 1822 (: 14-15, pl. 1, figs. 3a-c).

History of the case

1. Brongniart in 1822 (: 14-15, pl. 1, figs. 3a-c) figured two trilobites under the name *Calymene variolaris*. Pl. 1, fig. 3a is of an extended dorsal shield of an encrinurid with fixigenal spine clearly visible. Fig. 3b is a right lateral view of an enrolled dorsal shield: that it belongs to the suborder Phacopina and not to the family ENCRINURIDAE is indicated by the large eye, in which the lenses are distinguishable. Fig. 3c is an enlargement of the lenses of the eye of the same specimen as fig. 3b. Brongniart's diagnosis ends "angulis externo-posticis in mucrone productis". The description states "sur leur angle extérieure une sorte d'appendice qui se prolonge sur les côtés de l'abdomen, jusque vers la sixième articulation".

2. Murchison in 1839 (: 655, pl. 14, fig. 1) figured a dorsal exoskeleton of a trilobite under the name *Calymene variolaris* Brong. (var. ?) pointing out that it differed from Brongniart's figure [3a] in lacking what would now be called fixigenal spines, and stating that it might represent a distinct form.

3. Burmeister in 1846 (: 114) restricted Brongniart's *variolaris* to his figures 3a, c only (although these do not represent the same species) and quoted Murchison's pl. 14, fig. 1 in synonymy. Further on (p. 115) he wrote "I propose, however, to retain the name of *Calymene variolaris* for Murchison's species so-called, this being probably distinct; but I shall transfer the still older name *C. punctata* to the *Calym. variolaris* of Brongniart, which at an earlier period was certainly known by that name".

4. Salter in 1848 explicitly referred Brongniart's fig. 3b (not 3a) and Murchison's pl. 14, fig. 1 to *Cybele variolaris* (Brongniart).

5. Fletcher in 1850 (: 403-404) listed Brongniart's pl. 1, fig. 3a in the synonymy of '*Cybele punctata* Wahlenberg', and Brongniart's fig. 3b in the synonymy of '*Cybele variolaris* Brongniart, sp.'.

6 All subsequent authors have applied the name *variolaris* to the encrinurine species represented by Murchison's pl. 14, fig. 1, even though the species was not figured by Brongniart. No lectotype or neotype of *variolaris* has yet been designated.

7. Brongniart's pl. 1, fig. 3a is from a drawing by [Charles] Stokes of a Dudley specimen in the Johnson Collection but the specimen is now not to be

found in any of the museums known to hold parts of this collection. Brongniart himself stated that he did not know the whereabouts of the original of his figs. 3b, c.

8. The species figured in Brongniart's pl. 1, fig. 3a was re-figured by Buckland in 1836 (p.74, pl. 46, fig. 6) and named *Asaphus tuberculatus*. This figure probably represents Brongniart's specimen. *Encrinurus tuberculatus* (Buckland) has been recognised by Tripp (1962, p. 467) as a valid name for a species in the group of *Encrinurus punctatus* (Wahlenberg, [1818]) (for the suppression of *Trilobus punctatus* Brünnich, 1781, and the validation of Wahlenberg's specific name, see Opinion 537, *Ops. Decls. int. Comm. zool. Nomencl.* vol. 20 : 41-56).

9. If Brongniart's species were to be restricted to his fig. 3a (a procedure that would be in accordance with Brongniart's original interpretation as indicated by his diagnosis) the name *variolaris* would apply to a different encrinurine species from that for which it has been used for over a century, and Buckland's name would become a junior objective synonym.

10. If, on the other hand, Brongniart's species were to be restricted to his figs. 3b, c the name *variolaris* would apply to an unidentified member of the Phacopina.

11. The trilobite to which the name *Encrinurus variolaris* (sensu Murchison) has been applied is the well known "strawberry-headed" trilobite of Dudley, familiar to the early collectors, and widely represented in museum collections. The following is a selection of references in the literature:

1846 *Calymene variolaris* Brongn.; Burmeister, pp. 114-115.
1848 *Cybele variolaris* Brongniart (part); Salter, p. 344.
1850 *Cybele variolaris* Brongniart sp.; Fletcher, pp. 404-405, pl. 32, figs. 6-10.
1851 *Zethus variolaris* Brong. sp. : M'Coy, pp. 157-158.
1853 *Encrinurus variolaris* Brong. sp.; Salter, p. 7, pl. 4, figs. 13, 14.
1871 *Encrinurus variolaris* Brongniart; Baily, pp. 67-68, pl. 23, fig. 3.
1878 *Cryptonymus variolaris* Brongniart; Vogdes, p. 21, pl. 1, figs. 6-10; pl. 3, figs. 13, 14 (reproductions of Salter 1853, pl. 4, figs. 13, 14).
1884 *Encrinurus variolaris;* La Touche, pl. 10, fig. 253.
1907 *Cryptonymus variolaris* Brongn.; Vogdes, p. 74, pl. figs. 1-9, non fig. 10 (figs. 1-4, 7-9 reproductions of Fletcher 1850; figs. 5-6 of Salter 1853).
1917 *Cryptonymus variolaris*; Vogdes, pl. 3, figs. 1-9 (reproduction of Vogdes 1907, pl. 3).
1954 *Encrinurus variolaris* (Brongniart); Temple, pp. 315-318, text-figs. 1, 2.
1962 *Encrinurus variolaris* (Brongniart); Tripp, pl. 65, figs. 17-20.
1972 *Encrinurus* (*Frammia*) *variolaris* (Brongniart, 1822); Schrank, pl. 13, fig. 8.
1973 *Encrinurus variolaris* (Brongniart 1822); Clarkson and Henry, pp. 123-125 figs. 12-16.

12. In order to avoid the necessity for a change in current nomenclature, we recommend that the specimen figured by Murchison as *Calymene variolaris* Brong. (var.?) be designated as neotype of *Calymene variolaris* Brongniart, 1822. Since Murchison's specimen is clearly not conspecific with either of Brongniart's syntypes of *Calymene variolaris* it is necessary for Plenary Powers

to be invoked for validation of this designation. Murchison's specimen is now preserved in Birmingham University Museum under the number BU 55. It is from the Much Wenlock Limestone Formation of Dudley, and is figured in a paper submitted to the journal *Palaeontology* by the authors of this application. A label has been affixed to the specimen stating that it has been selected as the neotype of *Calymene variolaris* Brongniart, 1822, and that the International Commission on Zoological Nomenclature has been asked to validate this selection under its Plenary Powers.

13. In the light of the foregoing, the International Commission on Zoological Nomenclature is asked:-

(1) to use its plenary powers to rule that *Calymene variolaris* Brongniart, 1822, is to be interpreted by reference to the neotype specimen designated above;

(2) to place the specific name *variolaris* Brongniart, 1822, as published in the binomen *Calymene variolaris*, on the Official List of Specific Names in Zoology, with an endorsement that the neotype of the species is the specimen designated above.

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PROPOSED DIRECTION TO AMEND THE DATE OF *ENTOMOSTRACITES PUNCTATUS* WAHLENBERG (TRILOBITA) FROM 1821 TO [1818] (OFFICIAL LIST OF SPECIFIC NAMES IN ZOOLOGY No. 1595) Z.N.(S.) 2205.

By *The Secretary, International Commission on Zoological Nomenclature*

In Opinion 537 (1959, *Ops. Decls. int. Comm. zool. Nomencl.* vol. 20: 41-56), the Commission validated the specific name *Entomostracites punctatus* Wahlenberg, 1821 [sic], designated a lectotype for that species, and designated it as type-species of the nominal genus *Encrinurus* Emmrich, 1844 - all by the use of its plenary powers. Yet in the accompanying application on *Calymene variolaris* Brongniart (Z.N.(S.)2189), the applicants refer to "*Encrinurus punctatus* (Wahlenberg, 1818)", and there seems little doubt that they are right to do so. The acceptance of that date involves a change in the date attributed to *punctatus, Entomostracites*, Wahlenberg, when it was placed on the Official List of Specific Names in Zoology with the Name Number 1595 by the ruling in Opinion 537. The evidence is as follows.

2. Wahlenberg's *Petrificata Telluris Svecanae* appeared in two parts in the *Nova Acta R. Soc. Sci. Upsal.* vol. 8: 1-116, and (as *Additamenta ad Pet. Tell. Suec.*) : 293-296. The first, and main part of the work bears no date on its title-page, although the title-page of the whole volume bears the date 1821. The *Additamenta*, which are dated 1821, open with the words: "Postquam anno 1818 impressa fuerat Commentatio de Petrificatis Svecanis...". This shows that the first part was at least printed in 1818 and, since it formed part of a serial publication, the presumption must be that it was published immediately.

3. Lindström (1884, *Ofvers. k. Vetensk. Akad. Förh. Stockh.*, Ny Följd, vol. 19 (2), No. 6, 250 pp.) said in a footnote reviewing the date of Wahlenberg's work (: 111-112): "The date of most of the species published by Wahlenberg must be changed to 1818 instead of 1821, as has so often been used. His memoir 'Petrificata Telluris Svecana' [*sic*] in the eighth volume of the 'Acta Societatis Regiae Scientiarium' was indeed printed already in 1818, as Wahlenberg himself says in the beginning of the 'Additamenta' to that memoir, p. 293 of the same volume. The statement there given is: "Postquam anno 1818 impressa fuerat Commentatio de Petrificatis Svecanis' etc. The memoir had also been early enough distributed by its author to some geologists, as can be perceived by what Brongniart says in his 'Crustacés fossiles' (1822), p. 2, viz. '...M. Wahlenberg, dont le travail n'est venu à ma connaissance qu'en 1819'. But on the title page of volume VIII, containing the collected memoirs and papers, the year 1821 is printed, as it was not issued complete before that year."

4. Vogdes (1890, *Bull. U.S. geol. Surv.*, No. 63: 70), in a comprehensive bibliography of Palaeozoic "Crustacea", gave a double reference to Wahlenberg's work. Under the first, he said: "Wahlenberg (Geo.) Petrifcata telluris Suecana, Upsaliae 1818. This work was published and distributed in 1818 as a separate article, in advance of the Nova Acta Reg. Soc. Sci., vol. 8, 1821." In the second he said "----Petrificata telluris Suecana examinata a Georgio Wahlenberg. In Nova Acta Reg. Soc. Sci. Upsal., vol. 8, 1821, pp.

1-116, pls. 1-4." Vogdes gives no source for his information, but it may be significant that he gives the spelling "Suecana", and that Lindström gave the spelling "Svecana", both in place of the original "Svecanae". The two men may thus have been in communication on the subject.

5. There is an undated pencil note in the British Museum (Natural History) copy of vol. 8 of the *Nova Acta Soc. Reg. Sci. Upsal.* at the head of Wahlenberg's paper: "This 'tract' was received by the K. Vet.-Ac. Handl. in 1819; see that volume. Vogdes quotes it as 1818, see also J. de Phys. xci." The receipt of Wahlenberg's work is indeed recorded in *K. Vet. Acad. Handl.* for 1819, 1819: 307. Vol. 91 of the J. de Phys., 1822, contains a lengthy French translation of the work, but nothing material about the date.

6. The various bits of evidence here presented are quoted by Bassett & Cocks, 1974, *Fossils and Strata*, No. 3: 40 and by Hughes, C.P. and others, 1975, *Phil. Trans. roy. Soc. London*, Ser. B, vol. 272, No. 920: 604, but nothing new is added.

7. The two strongest bits of evidence in favour of 1818 as the year of publication are (a) Wahlenberg's own statement that the main work was printed in 1818, and (b) Brongniart's remark: "...M. Wahlenberg, whose work only came to my knowledge in 1819", implying an earlier date. The fact that the receipt in Stockholm of a work published in Uppsala was announced in 1819 is not very weighty evidence. There seem sufficient grounds, however, for citing the date as [1818] on external evidence, and it is recommended that the Commission alter the date of Name No 1595 on the Official List of Specific Names in Zoology, *punctatus, Entomostracites* Wahlenberg, accordingly.

INDEX TO AUTHORS

	Page
Ackery, P.R.	145
Archer, M.	127
Bass, A.J.	4
Bohart, R.M.	68, 72
Broadley, D.G.	214
Brooke, R.K.	4, 8, 144, 192
Brown, L.E.	195
Cernohorsky, W.O.	3, 190
Clemens, W.A.	212
Compagno, L.J.	70
Corbet, G.B.	136
Cornelius, P.F.	72
Cranston, P.S.	39
Dagg, A.I.	137
Delson, E.	46, 85, 149
Dempster, L.J.	142
Eisenmann, E.	6, 143
Fletcher, D.S.	137
Follett, W.I.	70, 142
Freidberg, A.	208
Funk, R.S.	195
Gilbert, C.R.	245
Heppell, D.	144
Hershkovitz, P.	135
Higgins, L.G.	145
Hill, J.E.	136
Hoffstetter, R.J.	212
Holthuis, L.B.	9, 136, 148, 150
Hubbs, C.L.	70
Huber, J.T.	10
Hughes, B.	248
Hutson, A.M.	39
Ingles, J.M.	136
Jeekel, C.A.	218
Jeffords, R.M.	69
Kashin, G.N.	144
Kohn, A.J.	4
Kudrna, O.	145
Kugler, J.	208
Lea, R.N.	90
Lemaire, C.	139
Lemche, H.	3, 72
Lindquist, E.E.	146
Manson, D.C.	147
Marshall, L.G.	212
Meester, J.	149
Melville, R.V.	98, 105, 150, 241, 253
Menke, A.S.	68
Miller, D.R.	118
Napier, P.H.	46, 136, 149
Nye, I.W.B.	137
Pascual, R.	212
Patterson, B.	212
Peters, D.S.	10
Pulawski, W.J.	71
Ramsay, G.W.	147
Robb, J.	204
Robins, C.R.	90, 142
Riley, N.D.	145
Roth, B.	144
St. Jean, J. (Jr.)	233
Shapiro, A.M.	221
Siveter, D.J.	61
Smith, Hobart M.	73, 195
Smith Meyer, M.K.	147
Smith, R.B.	73
Smithers, R.H.	150

	Page		Page
Stimson, A.F.	204	Vane-Wright, R.I.	39
Sylvester-Bradley, P.C.	61		
Tedford, R.H.	212	Watson, A.	137
Temple, J.T.	250	White, G.B.	228
Thomas, R.A.	216	Wild, R.	124
Tortonese, E.	9	Williams, D.J.	118
Tripp, R.P.	250	Wood, S.L.	4
Turnbull, W.D.	212		
Underwood, G.	204	Zimmermann, E.C.	6

LIST OF DECISIONS IN THIS VOLUME

Opinion		*Page*
1055	*Gryllus hieroglyphicus*, Johannes Mueller (Physiologist), suppressed	11
1056	*Eudyptes atratus* Finsch, 1875 ex Hutton MS, suppressed	16
1057	*Donax variabilis* Schumacher, 1817, suppressed	19
1058	*Papilio actaeon* Fabricius, 1775, suppressed	22
1059	*Calamopora* Goldfuss, 1829, suppressed	24
1060	*Diomedea leptorhyncha* Coues, 1866, suppressed	27
1061	*Homoceras* Hyatt, 1884, type-species for	29
1062	*Anobium* Fabricius, 1775, *Grynobius* Thomson, 1859, *Priobium* Motschulsky, 1845, type-species for	31
1063	*Lechriodus* Boulenger, 1882, type-species for	34
1064	*Ptenura* Templeton, 1844 and *crystallina, Podura,* Müller, 1776, suppressed	36
1065	*Polyzonium germanicum* Brandt, 1837, conserved: *Platyulus audouinii* Gervais, 1836, suppressed	151
1066	*Lyda alternans* Costa, 1859, given precedence over *Lyda inanis* Klug, 1808	155
1067	*Delphinus pernettensis* de Blainville, 1817 and *D. pernettyi* Desmarest, 1820, suppressed	157
1068	LEPTOSOMATIDAE in Aves and Nematoda: resolution of homonymy	159
1069	THRAUPIDAE (Aves), correction of author and date	162
1070	*Archaeopteryx lithographica* von Meyer, 1861 given precedence over *Pterodactylus crassipes* von Meyer, 1857	165
1071	LIOPELMATINA emendation to LEIOPELMATIDAE	167
1072	*Hyla crucialis* Harlan, 1826, refusal of request for suppression	170
1073	RIODINIDAE Grote, 1895 (1827), validated	172
1074	*Murex rana bubo* Linnaeus, 1758, designated as type-species of *Tutufa* Jousseaume, 1881	174
1075	*Striglina* Guenée, 1877 given precedence over *Daristane* Walker, 1859	176
1076	*Procyon brachyurus* Wiegmann, 1837 and *Procyon obscurus* Wiegmann, 1837, refusal of request for suppression	179
1077	*Cynocephalus* Boddaert, 1768, refusal of request for suppression	182

INDEX TO KEY NAMES IN NEW AND REVIVED CASES AND COMMENTS IN THIS VOLUME

	Page.
ACANTHOCOCCIDAE Signoret, 1875	119
Acanthococcus Signoret, 1875	119
Aceria Keifer, 1944	147
aceris, Acanthococcus, Signoret, 1875	121
acuta, Pleurocera, Rafinesque, 1831	106
ACYONIDAE Ameghino, 1889	212
Aglaja Renier, 1807	3
AGLAJIDAE Pilsbry, 1895 (1847)	3
"*Ancyloti*" Troschel, 1857	109
Anthropopithecus Blainville, 1838	136
APARALLACTINAE Bourgeois, 1968	74
Aparallactus Smith, 1849	82
ATTACIDAE Duponchel, 1844	139
augur, Trypeta, Frauenfeld, 1856	208
australis, Giraffa camelopardalis, Rhoads, 1896	136
benoit, Pharopteryx, Ruppell, 1852	9
Beyrichia Boll, 1847	63
Beyrichia M'Coy, 1846	61
BEYRICHIIDAE Matthew, 1886 (Crustacea: Ostracoda)	62
bifenestra, Heterodera, Cooper, 1955	70
bilineatus, Psammophis moniliger var. Peters, 1867	214
bituberculatum, Leiparthrum, Wollaston, 1854	4
brevipalpis, Toxorhynchites, Theobald, 1901	228
BUNGAROIDEA Fitzinger, 1826	78
buxi, Coccus, Fonscolombe, 1834	121
capensis, Aparallactus, A. Smith, 1849	82
carinatus, Chlorophis, Andersson, 1901	248
castoria, Pieris, Reakirt, 1867	221
cerasinus, Hypsilepis cornutus, Cope, 1868	245
Chaeropithecus Gervais, 1839	46
chilensis, Conger, Guichenot, 1849	92
Chimpansee Voigt, 1831	136
Chitinotylenchus Micoletzky, 1922	244
Circe Schumacher, 1817	144
CIRCI Sundevall, 1836, (Aves)	144
CIRCOINAE Sundevall, 1836 (Aves)	144
CIRCINAE Dall, 1895 (Mollusca)	143
CIRCINAE Sundevall, 1836	143
Circus Lacépède, 1799	143
COLOBIDAE Blyth, 1875	85
Coluber Linnaeus, 1758	81
COLUBRIDAE Oppel, 1811	74
conspicuus, Tanystropheus, H. von Mayer, 1852	125
constricta, Sminthopsis murina var, Spencer, 1896	127
constrictor, Coluber, Linnaeus, 1758	82
cornus, Drupa, Roeding, 1798	190
Cotyle Boie, 1826	192
cynocephalus, Simia, Linnaeus, 1766	49
czizeki, Tipula, de Jong, 1925	44,150

Page.

dipsaci, Anguillula, Kuhn, 1857 244
Ditylenchus Filipjev, 1936 241
DORIDIINAE J.E. Gray, 1847 3
Doridium Meckel, 1809 3
Drupella Thiele, 1925 190

Elampus Spinola, 1806 10,71
ELAPIDAE Boie, 1827 73
elata, Purpura, Blainville, 1832 190
Elaps Schneider, 1801 73
entellus, Simia, Dufresne, 1797 86
ERIOCOCCINI Cockerell, 1899 119
Eriococcus Targioni-Tozzetti, 1868 118
Eriophyes Siebold, 1851 146
Eudendrium Ehrenberg, 1834 72
Euplilis Risso, 1826 68

fasciatus, Hydrophis, Schneider, 1799 76
fasciatus, Hydrus, Schneider, 1799 82
fimbriata, Tipula, Meigen, 1818 40
fusca, Tipula, Bloch, 1776 40
fusca, Tipula, Staeger, 1840 40

"GAFRARIIDAE Korobkov, 1954" 145
"GAFRARIINAE Korobkov, 1954" 145
geniculata, Anculosa (*Lithasia*) Haldeman, 1840 111
Genypterus Philippi, 1857 90
Goniurellia Hendel, 1827 208
granulata, Stromatoporella (Nicholson), 1873 233

halecina, Sertularia, Linnaeus, 1758 72
Halecium Oken, 1815 72
Homorelaps (auctorum) Boulenger, 1896 73
Homoroselaps Jan, 1858 73
HYDROPHIIDAE Fitzinger, 1843 82
Hydrophis Latreille, 1801 76
hygeiae, Coluber, Shaw, 1802 82

kleinenbergi, Eretmophorus, Giglioli, 1889 9
kloedeni, Beyrichia, M'Coy, 1846 61

lacteus, Coluber, Linnaeus, 1758 82
lemniscatus, Coluber, Linnaeus, 1758 75
Leo Brehm, 1829 136
Leptotyphlops Fitzinger, 1843 204
limonii, Heterodera, Cooper, 1955 70
Liparthrum Wollaston, 1854 4
Lithasia Haldeman, 1840 106
loewi, Culex, Giebel, 1862 228

Macroscelesaurus, Haughton, 1918 124
Macroscelosaurus, H. von Meyer, [1852] 124
major, Phalaena (*Bombyx*) *pavonia*, Linnaeus, 1758 138
Mandrillus Ritgen, 1824 47
methwoldensis, Heterodera, Cooper, 1955 70
microstriata, Pieris napi, Comstock, 1925 221
Micrurus Wagler, 1824 73

Page.

minor, Phalaena (Bombyx) pavonia, Linnaeus, 1758 138
mitrata, Presbytis, Eschscholtz, 1821 87
molochina, Psammophis, Berthold, 1846 216
moluccensis, Conus, Dillwyn, 1817 4
multilineatus, Typhlops, Schlegel, 1839 204

napi, Pieris, Linnaeus, 1758 221
nattereri, Philodryas, Steindachner, 1870 216
nigricans, Genypterus, Philippi, 1857 92
nigricans, Typhlops, Schlegel, 1839 206
nigrofasciatus, Philothamnus, Buchholz & Peters, 1875 248
Notozus Förster, 1853 9,71

oleracea, Tipula, Linnaeus, 1758 39,150
Omalus Panzer, 1801 10,71

"Pachychili" Troschel, 1858 109
PALUDOMIDAE Gill, 1871 110
paludosa, Tipula, Fabricius, 1794 40
paludosa, Tipula, Meigen, 1830 40,150
Pan Oken, 1816 135
Panthera Hübner, 1823 136
Panthera Oken, 1816 135
panzeri, Chrysis, Fabricius, 1804 9,72
Papio Brisson, 1762 47
papio, Cynocephalus, Desmarest, 1820 53,148
Papio Erxleben, 1777 46,148,149
Papio Müller, 1773 46,148,149
paragracilis, Chitinotylenchus, Micoletzky, 1922 244
pardus, Felis, Linnaeus, 1758 135
Parnalius Rafinesque, 1815 145
pavonia, Phalaena, Linnaeus, 1758 138
Petromyzon Linnaeus, 1758 142
Pharopteryx Rüppell, 1828 9
Pharopteryx Rüppell, 1852 9
Phyllobius Germar, 1824 6
Phytoptus Dujardin, 1851 146
Pleurocera Rafinesque, 1818 105
PLEUROCERIDAE Fischer, 1885 110
plumbeolus, Alburnops, Cope, 1865 245
Polydrusus Germar, 1817 6
polygoni, Heterodera, Cooper, 1955 70
portoricensis, Siphonophora, Brandt, 1837 219
PRESBYTINA Gray, 1825 85
Presbytis Eschscholtz, 1821 85
punctatus, Entomostracites, Wahlenberg, [1818] 253
Pyri, Bombyx [Denis & Schiffermüller], 1775 138

Ramphotyphlops, Fitzinger, 1843 204
ramosa, Tubularia, Linnaeus, 1758 72
reticulata, Giraffa camelopardalis var., Weinland, 1863 136
Rhincodon Smith, 1829 70
Rhiniodon Smith, 1828 4,70
RHINIODONTIDAE Compagno, 1973 5,71
Rhopalum Stephens, 1829 68
SATURNIIDAE Boisduval, 1837 (Insecta) 139

Page.

Saturnia Schrank, 1802 137
SEMNOPITHECIDAE Owen, 1843 85
Semnopithecus, Desmarest, 1822 85
SIPHONOPHORIDAE Newport, 1844 (Diplopoda) 219
Siphonophora Brandt, 1837 (Diplopoda) 218
Siphonophora Fischer, 1823 (Bryozoa) 218
sphenocephala, Rana, Cope, 1886 195
sphinx, Simia, Linnaeus, 1758 46,148
spixii, Micrurus, Wagler, 1824 78
Stromatoporella Nicholson, 1886 233
subcunctans, Tipula, Alexander, 1921 44,150
submendosa, Tipula, Tjeder, 1941 41
subtaeniata, Psammophis sibilans var., Peters, 1882 214

Tanystropheus, H. von Meyer, [1852] 124
Theranthropus Brookes, 1828 136
Thoa Lamouroux, 1816 72
Tipula Linnaeus, 1758 39
Tipulariae Latreille, [1802-1803] 45
TIPULIDAE Latreille, [1802-1803] 45
tridens, Urellia augur, Hendel, 1910 209
troglodytes, Simia, Blumenbach, 1779 135
tuberculatus, Battus, Klöden, 1834 61
Typhlina Wagler, 1830 205
typus, Rhiniodon, Smith, 1828 71

urticae, Heterodera, Cooper, 1955 70
utricularius, Rana, Harlan, 1826 195

variolaris, Calymene, Brongniart, 1822 250
verrucosa, Pleurocera, Rafinesque, 1820 106
virescens, Rana virescens, Cope, 1889 201
virescens, Rana, Cope, 1889 195

Zerynthia Ochsenheimer, 1816 145

NAMES PLACED ON OFFICIAL LISTS
AND INDEXES IN DECISIONS PUBLISHED
IN VOLUME 33.

Official List of Generic Names in Zoology

Anobium Fabricius, 1775
Cynocephalus Boddaert, 1768
Daristane Walker, 1859
Grynobius Thomson, 1859
Heteromurus Wankel, 1860
Homoceras Hyatt, 1884
Latona Schumacher, 1817
Lechriodus Boulenger, 1882
Leiopelma Fitzinger, 1861
Leptosomatum Bastian, 1865
Leptosomus Vieillot, 1816
Paleofavosites Twenhofel, 1914
Polyzonium Brandt, 1837
Priobium Motschulsky, 1845
Riodina Westwood, [1851]
Striglina Guenée, 1877
Tutufa Jousseaume, 1881

Official List of Specific Names in Zoology

acteon, Papilio, von Rottemburg, 1775
alternans, Lyda, Costa, 1859
alveolaris, Calamopora, Goldfuss, 1829
asper, Favosites, d'Orbigny, 1850
brachyurus, Procyon, Wiegmann, 1837
bubo, Murex rana, Linnaeus, 1758
carpini, Anobium, Herbst, 1793
crassipes, Pterodactylus, von Meyer, 1857
crucialis, Hyla, Harlan, 1826
cuneatus, Donax, Linnaeus, 1758
discolor, Cuculus, Hermann, 1783
elongatum, Leptosomatum, Bastian, 1865
excavatum, Anobium, Kugelann, 1791
germanicum, Polyzonium, Brandt, 1837
hieroglyphicus, Decticus, Klug, 1832
hochstetteri, Leiopelma, Fitzinger, 1861
inanis, Lyda, Klug, 1808
irrorata, Diomedea, Salvin, 1883
lithographica, Archaeopteryx, von Meyer, 1861
lysippus, Papilio, Linnaeus, 1758
margaritarius, Heteromurus, Wankel, 1860
melanopyga, Asterophrys, Doria, 1875
obscurus, Procyon, Wiegmann, 1837
punctatus, Ptinus, de Geer, 1774
robustus, Eudyptes, Oliver, 1953
scitaria, Drepanodes, Walker, 1862
sclateri, Eudyptes, Buller, 1888
smithii, Goniatites, Brown, 1841
tibiaria, Daristane, Walker, 1859
variabilis, Donax, Say, 1822
volans, Lemur, Linnaeus, 1758

Official List of Family-Group Names in Zoology

LEIOPELMATIDAE Mivart, 1869 (Amphibia)
LEPTOSOMATIDAE Filipjev, 1916 (Nematoda)
LEPTOSOMIDAE Blyth, 1838 (Aves)
POLYZONIIDAE Newport, G.V. 1844
RIODINIDAE Grote, 1895 (1827) (Lepidoptera)
THRAUPIDAE Cabanis, 1847 (Aves)

Official Index of Rejected and Invalid Generic Names in Zoology

Calamopora Goldfuss, 1829
Galeopithecus Pallas, 1783
Leptosoma Bonaparte, 1850
Liopelma Günther, 1868
Platyjulus Brandt, 1840
Platyulus Gervais, 1836
Ptenura Templeton, 1844

Official Index of Rejected and Invalid Specific Names in Zoology

actaeon, Papilio, Fabricius, 1775
atratus, Eudyptes, Finsch, 1875 (ex Hutton MS.)
audouinianus, Platyulus, Gervais, 1837
audouinii, Platyulus, Gervais, 1836
crystallina, Podura, Müller, 1776
hieroglyphicus, Gryllus, Johannes Mueller (Physiologist), 1826
leptorhyncha, Diomedea, Coues, 1866
pernettensis, Delphinus, de Balinville, 1817
pernettyi, Delphinus, Desmarest, 1820
variabilis, Donax, Schumacher, 1817

Official Index of Rejected and Invalid Family-Group Names in Zoology

ERYCINIDAE Swainson, 1827
LEIOPELMIDAE Turbott, 1942
LEPTOSOMATINAE O. des Murs. 1860
LEPTOSOMATINI Filipjev, 1916
LIOPELMATINA Minart, 1869
LIOPELMIDAE Noble, 1924

CORRIGENDA

Vol. 28:

page 158. Line 1, and throughout the paper for *Palaeofavosites* Twenhofel, 1914 read *Paleofavosites* Twenhofel, 1914.

Vol. 31:

page 112. Line 17, and throughout the paper for the Comment on *Palaeovavosites* Twenhofel, 1914 read *Paleofavosites* Twenhofel, 1914.

Vol. 32:

page 214. Delete paragraph 3 of Ruling. This name was placed on the Official List of Specific Names in Zoology with the Name Number 135 by the Ruling given in Opinion 291

page 222. Paragraph 7 (a) second line:
for Name Number 467 read Name Number 470.

page 222. Paragraph 7 (b) second line:
for Name Number 468 read Name Number 471.

page 222. Paragraph 7 (c) third line:
for Name Number 469 read Name Number 472.

page 222. Paragraph 7 (d) third line:
for Name Number 470 read Name Number 473.

page 260. Para (2) third line:
for 1973 read 1873.

Vol. 33:

page 24. Line 7, and throughout Opinion 1059 read *Paleofavosites* Twenhofel, 1914 for *Palaeofavosites* Twenhofel, 1914.

page 31. Paragraph 2 (a) line 2:
for *tectus* read *punctatus*.

page 31. Paragraph 3 (a) line 1:
for *tectus* de Geer, read *punctatus* de Geer; and for *Ptinus tectus* read *Ptinus punctatus*.

Back cover (outside) line 15:
for John read Kohn.

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